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Joint Meeting of Allied Health Professional Projects Staff and the Board of Directors and Staff, League for Innovation in the Community College (Los Angeles, Nov. 20, 1968). Interim Report.

Allied Health Professions Projects, Los Angeles, Calif.; California Univ., Los Angeles. Div. of Vocational Education.

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Thirty-five representatives participated in a joint meeting to share information about the Allied Health Professions Projects and paramedical education at League Colleges, and to plan for cooperative work. In an informal summary, B. Lamar Johnson outlined areas of possible cooperation that he believed would emerge from an examination of the minutes of the session. These included: (1) participation in a workshop conference at Delta College in Michigan on the Auto-tutorial nursing project there, (2) participation in work in multi-media instruction in the health occupations field, (3) planning related to funding and grant applications, (4) assembling of information related to curriculum development, for the use of the League and Colleges initiating programs, and (5) the development of core programs in health occupations. Appendixes present information about the University of California at Los Angeles clinical instructor training program, Delta College autotutorial nursing project, Laney College experimental nursing program, Los Angeles City School Districts health occupations programs and projects, and allied health programs of El Centro College. (JK)

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NARRATIVE REPORT

Joint Meeting

ALLIED HEALTH PROFESSIONS PROJECTS STAFF

and the

BOARD OF DIRECTORS AND STAFF, LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

INTERIM REPORT

PROJECT NO. 8-0627

University of California, Los Angeles
November 20, 1968

UNIVERSITY OF CALIFORNIA, LOS ANGELES
Division of Vocational Education

ALLIED HEALTH PROFESSIONS PROJECTS
825 South Barrington Avenue
Los Angeles, California 90049

December, 1968

VT007841

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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NARRATIVE REPORT

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FOREWARD

This report presents in detail the initial conference of the UCLA Allied Health Professions Projects and the Board of Directors and Staff representatives of the 12-member League for Innovation in the Community College. It marks the emergence of planning of national scope for the Allied Health Professions Projects, in that the League, with its nationwide representation, has invited the participation of the Projects in its activities, and pledged its cooperation in the attainment of Allied Professions Projects objectives.

The document reports one day's business of a three-day conference of League personnel which planned its Los Angeles meeting, November 19-21, 1968, so as to allow for a full day of joint meeting with the staff of the Allied Health Professions Projects. The separate meetings of the League Board of Directors will be reported by the League itself.

Because of the essential role of the allied health occupations in the expanding programs of community (junior) colleges as they seek to meet the needs of their own communities for both the two-year academic studies and the pre-service and in-service education of much needed professionals and sub-professions to be trained at levels up to the Associate of Arts degree, a genuine community of interest exists and has been demonstrated by the League and the Allied Health Professions Projects.

It is anticipated that as the Projects move into task analysis, curriculum development and teacher education in the allied health fields, the members of the League will cooperate by sharing their own experience and knowledge, and by helping to validate new materials and approaches as they are developed by the Allied Health Projects team and, upon occasion, cooperatively by the League and Projects teams.

Melvin L. Barlow, Principal Investigator
UCLA Allied Health Professions Projects

B. Lamar Johnson, Executive Director
League for Innovation in the
Community College

December, 1968

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AGENDA

For the Meeting of

BOARD OF DIRECTORS AND LEAGUE REPRESENTATIVES
LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

With the Staff of

ALLIED HEALTH PROFESSIONS PROJECTS
DIVISION OF VOCATIONAL EDUCATION, U.C.L.A.

825 So. Barrington Ave., Suite 305
Los Angeles, California 90049

WEDNESDAY, NOVEMBER 20, 1968

Presiding: Edward Simonsen, Chairman, Board of Directors
League for Innovation in the Community College

The Allied Health Professions Projects: Objectives, Programs, Progress and Projections:

Melvin L. Barlow
Miles H. Anderson
Katherine L. Goldsmith
Mary E. Jensen

Reports on Allied Health Professions Developments and Plans at League Colleges:

Chicago City College	Oscar E. Shabat
Dallas County Junior College District	Bill J. Priest
Delta College	Donald J. Carlyon
Foothill Junior College District	Calvin C. Flint
Kern Junior College District	Edward Simonsen
Los Angeles City Junior College District	T. Stanley Warburton
Los Rios Junior College District	Walter T. Coultas
Orange Coast Junior College District	Norman E. Watson
Peralta Junior College District	John W. Dunn
Junior College District of St. Louis	Joseph P. Cosand
Santa Fe Junior College	Joseph W. Fordyce
Seattle Community College	Ed K. Erickson

Discussion of plans for cooperative work between and among League colleges and the Allied Health Professions Projects.

Plans for future meeting or meetings.

ROSTER AND ATTENDANCE LIST

Joint Meeting, November 20, 1968

LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE
ALLIED HEALTH PROFESSIONS PROJECTS

Member Colleges and Representatives

Chicago City College, Chicago, Illinois
    *Dr. Oscar E. Shabat, Chancellor
    Meyer Weinberg, Coordinator of Innovation Center
Dallas County Junior College District, Dallas, Texas
    Dr. Bill J. Priest, Chancellor
    H. Deon Holt, Director of Development
Delta College, University Center, Michigan
    Donald Carlyon, President
    Dr. Martin Wolf, Director of Research and Development
Foothill Junior College District, Los Altos Hills, California
    Dr. Calvin Flint, Superintendent
    Dr. Donald Ewing, Dean of Educational Services
Kern Junior College District, Bakersfield, California
    Dr. Edward Simonsen, President
    Burns L. Finlinson, President, Bakersfield College
Los Angeles Junior College District, Los Angeles, California
    Dr. T. Stanley Warburton, Associate Superintendent
    Dr. John Grasham, President, Los Angeles Southwest College
Los Rios Joint Junior College District, Sacramento, California
    Walter T. Coultas, Superintendent
    William McNelis, Director of Research and Development
Orange Coast Junior College District, Costa Mesa, California
    Dr. Norman Watson, Superintendent
    Dr. Robert B. Moore, President, Orange Coast College
Peralta Junior College District, Oakland, California
    Dr. John W. Dunn, Superintendent
    *Dr. Wallace Homitz, President, Laney College
Junior College District of St. Louis, St. Louis, Missouri
    Dr. Joseph P. Cosand, President
    Walter E. Hunter, Dean, Meramec College
Santa Fe Junior College, Gainesville, Florida
    Dr. Joseph Fordyce, President
    Dr. Ann Bromley, Director of Research and Development
Seattle Community College, Seattle, Washington
    Dr. Ed K. Erickson, President
    Arthur Siegel, Chairman of the Board of Trustees

Staff, League for Innovation

    Dr. B. Lamar Johnson, Executive Director
    Richard D. Howe, Coordinator
    Mrs. Virginia A. Hobson, Secretary

* Not present for meeting.

ROSTER AND ATTENDANCE LIST

ALLIED HEALTH PROFESSIONS PROJECTS

*Dr. Melvin L. Barlow, Principal Investigator

Dr. Miles H. Anderson, Director

Dr. Katherine L. Goldsmith, Deputy Director

Associate Directors

Mary Jensen	Nursing Occupations
Martin Ross	Clinical Laboratories
Dick McCartney	X-Ray Inhalation Therapy Cardiopulmonary
**Tom Freeland	EEG EKG EMG
Bob Henrich	Housekeeping Business
Dolores Tarter	Medical Records Medical Secretary Medical Assistant
Pat Thouin	Therapy Rehabilitation

Mary Ellison, Editor

*Present at opening session only
**Not present

Summary Report

Joint Meeting
UCLA ALLIED HEALTH PROFESSIONS PROJECTS
LEAGUE FOR INNOVATION IN THE COMMUNITY COLLEGE

Wednesday, November 20, 1968
Los Angeles, California

Dr. Edward Simonsen, Chairman

The meeting was opened at 9:00 a.m. with the Chairman's request that each person present identify himself by name, school, and title. The formal business of the day then was initiated.

Chairman: Before we start our very full agenda, I'd like to remind you all of the letters you received from Dr. Anderson summarizing the purposes of this meeting. First of all, it's to get acquainted with the objectives and the achievements up to the present time and the plans for the future of the Allied Health Professions Projects. Second, to get acquainted with developments and plans for paramedical education at League colleges. In this connection, this group will be particularly interested in innovative developments. Third, to make initial plans for cooperative work between and among League colleges and the Allied Health Professions Projects.

Our plan today is to complete the first two items this morning and spend the afternoon on the third, that is, evaluating some of the projects and developing ways in which we can work together to the mutual benefit of both the League and the Projects. Dr. Johnson, do you have some comments?

Dr. B. Lamar Johnson, Executive Director, League for Innovation in the Community College: As I have talked with the members of the League, I have been tremendously impressed by the unanimity with which they have expressed enthusiasm about the Allied Health Professions Projects. We have in this room representatives of 12 community college districts that are committed to leadership in these fields, and are particularly interested in innovative developments. And this is consonant with the work and commitments of the Allied Health Professions staff.

This meeting has even more significance than to advance programs and plans in the allied health professions. This is our task and this is what we are committed to. But the plans developed here may, at a later date, affect the teaching of English composition, American history, chemistry, and other curriculum fields. I feel that the Allied Health Professions are going to offer real leadership in a variety of fields.

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From the institute on multi-media instructional facilities that Norm Watson and the folks at Golden West are planning, there may well emerge a relationship that will affect not only the health fields, but other aspects of the curriculum as well.

Chairman: To start off, we're asking the staff members from the Allied Health Professions Projects to discuss objectives, programs, progress. I introduce Dr. Mel Barlow.

Dr. Melvin L. Barlow, Principal Investigator, Allied Health Professions Projects: I think you pretty well understand from the material Miles Anderson has sent to you the nature of this project, and what some of the objectives are. We have a kind of basic commitment to the junior colleges and community colleges anyway, and because of Lamar Johnson's leadership in junior college work we get together and share ideas quite frequently. We could see immediately the value of getting the representatives of the League here to chat with us, and I expect that we'll flush some good ideas out of the bushes as we exchange ideas today. This is the sense of what we're really getting after today.

It's good to see some of you whom I haven't seen for a long time. Now, I'm going to leave the details or the specifics to Miles Anderson, because he is Director of the Allied Health Professions Projects, and as some of you know, he has had 15 or 16 years of experience in directing a related work project in Prosthetics and Orthotics for the UCLA School of Medicine and Engineering School. He's up to date on many things in this area. I think we are very fortunate to have this group here today to work on the program from the community college point of view.

The degree of interest we already have seen has been very pleasing to me. We've had literally a stack of letters from every part of the country and from almost as wide a variety of people and institutions, and things seem almost too good. I was talking to Lee Ralston the other day about the project on which he is working, and he said, "I'm worried. Things are too good. There's going to be a real problem somewhere along the line, because things just can't be this good all the time."

Well, I'm certainly glad you're here, and I'm sorry I can't spend the day with you, but I'm off to see my dentist, who decided this is the day to investigate a problem.

Dr. Miles H. Anderson, Director, Allied Health Professions Projects: It's a real pleasure to welcome this distinguished group to our Project and our facilities here, and we are honored to have you spend the entire day with us. I won't go into any great detail about the program, because our Deputy Director, Dr. Katherine Goldsmith, is going to do that. I just want to make a couple of remarks about our over-all mission, which is to develop curricula and instructional materials that will be useful in continuing education programs--what we used to call Extension programs--or, to drop into the vernacular, upgrading. One of my professors at Berkeley scolded me for using such a vulgar expression, but it is expressive. It indicates one of our major initial problems, and that is, to develop materials that will upgrade or improve the people who already are engaged in the various occupations.

To be specific: as Dr. Barlow indicated, I spent 16 years running a program at the UCLA Medical School for training people in artificial limbs and braces--Prosthetics and Orthotics. We started off with an Extension or Continuing Education program to improve the people already in the field, to help them change over from making artificial arms out of leather, wood, and steel with catgut thongs, to the improved devices developed through research programs, which offered much more efficient prostheses for amputees than had been available before.

The purpose, as I've said, was to bring in the men already working in the field and teach them how to make artificial arms using the new procedures--plastics instead of leather, and aircraft-type cable assemblies instead of catgut, and the like. Within a couple of years we almost literally revolutionized the extremity prosthetics philosophy and craft in the United States through this UCLA Extension or Continuing Education program.

As time went on, we started what you might call a pre-employment type of certificate program for the purpose of bringing new blood into the field. Rather than offering the on-the-job, lengthy experience type of program, we brought in students for a year of very intensive training and then they would go out and serve a period of internship. To keep them up to date, it was necessary to bring them back at regular intervals for short intensive courses--not refresher courses, but rather courses in new material that had been developed by research. We taught Physical Therapists, Occupational Therapists, Orthopedists and Physiatrists in the various aspects of prosthetics.

About a year or so ago, as far as I can tell, Dr. Ernest Burgess ran a very successful research program in Seattle at Swedish Hospital, using ideas that had been picked up in Poland and other places for a new approach to prosthetics. This was called "immediate post-surgical prosthetic fitting," which meant that they put the artificial limb on an amputee right there on the operating table, before he came out from under the anaesthetic. Well, this was new and revolutionary and none of the surgeons in the United States knew how to do it. So we ran a series of three-day crash programs on it at UCLA with Ernie Burgess as the instructor for the first few. This, we feel, is the type of program that improves and upgrades the people who already are in the field. As new and innovative ideas come along, you improve the practitioners' skills by offering them appropriate courses--bring them in, give them the new ideas under intensive circumstances, and then send them back to put the new approaches into practice--and this we did.

The three-day courses were very successful and we trained about 225 surgeons and prosthetists from all over the United States, so that immediate post-surgical prosthetic fitting now is a part of what they call their "armamentarium," that is, the way of handling patients which improves the situation by reducing the hospital stay from as long as two to three months to as little as one week, which means a great saving. In addition, it reduces the pain and fitting problem for the patient. So this was a very successful venture.

This is the kind of program that I think we should look to, to keep all of the various health-related occupations right up to date, and then, in addition, to develop a fundamental base for producing new people, and using Extension to keep them right up to the minute in all new developments as they come along. So we have a dual objective. One is to keep right up to the minute with the latest research findings, one of the biggest problems in research being to get the research knowledge out into the field and used, and Extension or upgrading or continuation programs are probably one of the best ways of doing this.

Then, the second objective is to develop well-rounded, up-to-date and and efficiently prepared and taught basic courses to prepare new people to enter these various occupations. The two just can't be separated. I think they have to go hand in hand.

The third point I want to make follows immediately after the first two: when we do have a pre-employment type program at a community college or even in a high school or area vocational school--wherever it may be appropriate to have it--almost invariably it is necessary for the student who completes this training to have a period of internship in a hospital or in some other institution such as a rehabilitation center, where he can have intensive practice in the application of what he was taught. This is absolutely essential in training doctors--they spend four years in medical school, and after they get their M.D. degree they serve at least a year of internship, where they are really taught to be doctors working with sick people; and then if they want to specialize they put in another four years as a resident to specialize in orthopaedics or what have you.

We don't think we can overlook the fact that making arrangements for clinical experience is absolutely essential for the graduates of our allied health programs that may be put on in the community colleges. It's almost impossible to arrange for enough clinical experience, even with the affiliations that we may have, to make them really expert without a period of well-operated, supervised and planned internship in a healing institution, such as a hospital or rehabilitation center. It is absolutely essential to provide this experience, to turn out a finished product that then is competent to work with ill people and do a good job.

Then, the fourth point is an area in which I really am very much interested--how to improve this clinical instruction, or this on-the-job training, so that it is planned and made into an effective, efficient educational program rather than just work. Many medical interns feel that they are a kind of cheap labor in the hospital where they work, though they realize that they are learning a lot; but it doesn't seem organized or purposeful, and probably has been stretched out into far too many years. I've talked to residents in orthopedics at UCLA-they put in four years there. During that time, one young fellow did 115 hip pinnings. He said he knew as much about the procedure after the tenth such operation as after the hundredth, and in the meanwhile there were other things he should have learned, such as compound fractures of the lower leg. Some of these interns never had an opportunity to learn the full scope of their fields and had to omit some essentials simply because the experience was not planned.

But on-the-job training in the clinical setting can be organized and made more effective. I developed and put on what we call clinical instructor training programs for people who are supervising on-the-job training for anyone in the allied health professions. It takes about 12 hours to give them the fundamentals of how to organize an on-the-job training program, how to teach it, and how to plan to teach it, and that's about all they need to do the job--but they do need that. I have a little pamphlet here that we use to develop interest in this program and there are enough for all of you.* I completed working last week with a group in Honolulu at the Shriners' Hospital--11 nurses and one physical therapist--and there will be three more such groups in Hawaii before we are through there.

I think that it is very important to improve the quality of clinical instruction, and I think the community colleges can play a major role in this by recognizing that their graduates in any of the health-related fields should have a period of clinical instruction after they leave, and that the school should have a hand in it--not just stand off and say, "Well, we've finished with you; now get on out there to the hospital or wherever you are going and get with it." The schools certainly can play an important role in working with the clinical institutions where their graduates go, and helping to see that a good job is done in on-the-job training after the students have left the school. So that, really, I think, summarizes what I feel is the hierarchy of objectives that we have in this program.

As I have said, Dr. Goldsmith will go into detail explaining the process with regard to staffing and the manner in which the various occupations will be approached, how we hope to achieve the objectives through working with committees, and so on. I really want to thank you again for coming. I know our main purpose is to listen to what you have to say, and I'm looking forward eagerly to your comments as each of you has the opportunity to explain what he is doing at his own school or district, because this will be very useful to us as a means of guiding us

* See Appendix A

in our efforts in the oncoming three or four years of this program. So thanks again for coming. It will be a real pleasure to spend this day with you.

Dr. Katherine L. Goldsmith, Deputy Director, Allied Health Professions Projects: This is a very exciting project to be in on. It's exciting for a number of reasons. The medical fields are so changeable and so fluid now that it's going to take all our efforts, yours and ours, to keep up with what's going on in patient care and in patient care delivery systems. In other words, many of these professions in which we are interested are not going to be occupations where the jobs are stable, where they have remained the same for the past five or ten years, and are going to stay that way for the next five or ten years.

We really have not too many guarantees of stability in the health fields. There is so much stress on improving delivery systems, improving the quality of care, that new occupations are going to be developing constantly. Some occupations that are here today and that need special training are going to disappear, because automation is going to come in. People jump up and down and kick and scream and say that in certain fields, it won't or can't. I said recently to a pathologist friend, "You know, your cytotechnologist probably will be non-existent in five to ten years," and she replied, "She will not--you'll always need a human being." I agree--but it's going to be a different human being. A cytotechnologist--a girl who looks at cells taken from the body, like Pap smear, at this point does what a computer really could do, that is, screens for abnormals. Then somebody with more training takes a look at the abnormals and the questionables. It's my feeling that computer scanning is going to take over this particular job, and then the girl we train in junior college is going to have to have the skills to detect whether an atypical is truly abnormal and needs to be looked at by a physician or even a higher-trained tech, or whether this just one of variants of normal.

In a sense, I think I'm saying that the tasks we are training for now may be non-existent in the not too distant future. We may have to teach people or train people how to learn, so that once they get out on the job they can pick up new skills and new techniques, because these needs are going to be developing constantly. Our lab technicians, in California particularly, spend five years before they go into a laboratory. The ones at Kaiser Hospital are very perturbed because they have a little machine down there, where you draw a sample of blood and put it into the machine, and out come a dozen chemical analyses that would have taken a girl a day or two to run. Really, the five-year lab techs at Kaiser weren't needed to do these chemistries--it could have been done by a junior college graduate or a two-year person; but for now, it is taking five years to train this girl, and suddenly a machine comes in and steals her job.

Of course the machines have to be operated--their findings have to be interpreted--and since a machine can only rule out the very absolute normal, somebody with some judgment and know-how and brains is going to have to look such a finding and ask, "How abnormal is it? Is it merely a variant?". So this is why this field is so challenging.

When we were first asked to set up,in order of priority, the 18 occupations to be covered in our project over the next four years, I said, "That's impossible. I'll be glad to choose the first six or eight." But what will be happening in the next four years is so variable that during this year I'd like to find out what the priorities are for the following year, and during the next year, for the year after, this being in terms of working with people in the fields of education and medical care, to find out what their needs are as they develop.

To back up a little: the changes in the medical care field have occurred as a result of legislation, primarily during the last Congress. There were three or four big health acts. Part of Medicare; improved medical care; comprehensive health planning--these have put great stress on how we are going to use people to do a decent job, as well as how to use the facilities, and how to limit the--at this point unlimited--sprouting of facilities without much planning.

And then Regional Medical Programs, with which all of you can become involved, which are directed at improving patient care through innovative ways of taking care of patients; and in some Regional Medical Programs the stress has been on the physician, until they find that the physician really can't do the job without an awful lot of backup people; and all of a sudden they're moving down to needing the people that can be trained at the level in which we're interested--the assistants, the aides, the in-service training of people already on the job in the utilization of new concepts, new patient care ideas and new equipment.

So as a result of legislation, we are going to see a lot of movement, I hope--unless the next Congress backs up. And the Regional Medical Program is largely private-practitioner run, from what I can see. The men I worked with were straight from private practice.

This is what makes the project so exciting. It also determines to a certain extent the staff that we recruited and tried to get. We tried to build a staff that would be a good mix between medical care people and educators, figuring that we always could get consultants where we felt at a loss in either field, and in many fields we tried to get generalists who knew some things, but primarily could work well with people--people who are not scared of either educators or physicians--and both groups have segments of the population whom they scare; but I don't think they scare anybody on our staff.

We also found in recruiting that one of our best pools of talent were the doctoral candidate group at UCLA and USC, these being among the sharpest people available on a half to full-time basis. We originally were looking for full-time people and found that our sharpest prospects really were the doctoral student group; so having gone through the red tape of the University of California, we've managed to get a few of them. The SC people are much easier to recruit because we don't have to worry about the rules UCLA imposes on its own doctoral students.

Let me start by introducing the staff, and with them the groups of occupations in which they'll be working, and then we can discuss them a little bit.

Mary Jensen is in charge of the nursing group. Nursing is in the process of much traumatic change, from what I hear in the field, with the efforts in professionalization, the efforts to really define the roles of both the nurse and the sub-nurse categories as they exist, and the tremendous shortage that has always existed in nursing. Who's going to do the job--what is the RN going to do--and, by the way, I bring it up here--as we look at what the two-year RN is going to do, we also have to look all the way up the line and all the way down.

We have to plan for the support services to the nurses, but we also have to see whom the two-year nurse is supporting and what her role is in that capacity. Things are happening with the four and five-year nurses--there's a meeting in Denver this week that I wish I could have attended. In discussion of the program that was planned for Denver, I got the impression that this person is going to be not categorized as a nurse, but as a five-year person called a Pediatric Assistant. It could be a nurse as far as I am concerned--a four-year RN with an additional year. But I don't think Dr. George Silver is planning it that way. I think he is taking a freshman in college and at the end of five years calling her a Pediatric Assistant; and this girl will be able to do virtually anything a pediatrician can do except the more complicated diagnoses.

Where does the two-year nurse fit into this? Where does the Aide fit into this? How do we recruit people to go into these fields? There are going to be very serious problems that Mary Jensen is tackling--as well as assisting to develop good materials for teaching, so that enough good teaching programs can go on that kids come out with appropriate experience and appropriate skills.

Martin Ross is a graduate student in Medical Care administration at UCLA and presently moonlighting part-time at Mt. Sinai Hospital here in Los Angeles as Assistant Administrator. He is going to join our staff to take over the laboratory group, which is an exceptionally tricky group at this point because of State licensure regulations; each of you will have to check his own State license regulations in this regard. California, as I've said, at this point cannot use the two-year tech; but that doesn't stop us from developing curricula and materials in it because we think there is a good place for the two-year technician, and other States can use them, so we just say, "OK, California, you're not with us this time." A lot of people in California would like to develop this occupation but at this time there's legislation on the books that says two-year technicians can't do anything--there just is no place for them.

Dr. Johnson: This would be relevant to some of our colleges--those outside the State of California.

Dr. Goldsmith: That's what I'm saying. And we are working on all the states other than California. The pathologists and some technicians in California will work with us. Many other states have this two-year technician and it's going to be Marty's job to find out essentially what the configuration, the pattern of jobs is going to be in the laboratory, as well as getting materials ready to go. It's very fluid. Marty also has some other nice goodies like the cytotechnologist and what she is going to be doing and what kind of training programs there are for him or her--usually, it's a "her."

The next staff person I'm introducing is taking over at this point an interesting area--Radiation Therapy and Inhalation Therapy. The minute I mentioned that, somebody said something about the Cardiopulmonary Technician. This is one of the new Regional Medical Program technicians, really. All of a sudden somebody realized they needed someone who could run some of the machines that are used in cardiopulmonary testing and care and evaluating patients as far as their cardiopulmonary systems are concerned, and all of a sudden demand for this technician has sprouted. The person who covers this field and anything new that crops up in these areas is Dick McCartney. Dick's background is in Medical Care Administration; he's a doctoral student here at UCLA. Also, he holds teaching credentials in Industrial Arts and teaches extended day, over at Los Angeles State. So we expect him to do well in that area.

Tom Freeland is a doctoral student down at USC and teaches there. His main interests are medical instrumentation, calibration and the measurement of electric impulses and electric outputs from the body, which makes him great in one area that you may find your community is going to need--the electoencephalographic technician, the EKG tech, possibly the electromyographic technician are occupations we didn't have in the original grant application; but when I talked with Dr. John Affeldt, Medical Director of the Los Angeles County Hospitals, he said, "This is a group that's going to be needed--the demand is coming for training of this group."

Last year, there were approximately ten such programs in the United States, run by physicians in medical schools and medical centers, and funded at one year by the Office of Education. The Office of Education has lost authorization for one-year funding and all funding for these programs comes through the National Institutes of Health, and those are two-year programs. So how do we train this electro-technician?--the EEG technician is the one that had the ten programs--how do we combine this thing into a two-year program so that we can get NIH funding? Or do we leave it as a separate one-year program and look elsewhere for funding? Actually, none of the electro-technician programs were in California--they were all in other states. I have the list here. I haven't introduced Tom Freeland because he couldn't be with us today.

Now, let me introduce Bob Henrich. Bob is a hospital administrator who got his degree in Hospital Administration a number of years ago at UCLA and since then has been with the Air Force and with Kaiser, and his interests,and the interests of many hospital administrators, are in housekeeping. What did you call it yesterday, Bob?

Bob Henrich: Allied Facilities and Support Occupations.

Dr. Goldsmith: We originally had called this area Housekeeping and Business, but the other sounds better and better represents what we mean. Essentially, these are all one--Laundry Services, Housekeeping Services, the Business Office, the Ward Manager and Ward Clerk. The last is a relatively new occupation,a person used on the floor, keeping charts, keeping track of patients, doing the non-nursing clerical maintenance kind of thing that goes on on a floor. If you have been in a hospital you have seen the nurses sitting around the room, paying no attention to flashing lights, because they have to get their charting done. The Ward Clerk will take over some of this; the Ward Manager will handle this part of the floor, I think.

Also in this area are Dietary and Pharmacy and something called Environmental Health, which may develop eventually. There was only one Environmental Health Technician program in the survey that Mary Jensen did originally. It's on a two-year level. This field is up for grabs at this point. As you go around talking to hospital people, they have various ideas about this. It might mean the person who helps the Infection Committee, in other words, a budding or beginning microbiologist; or it might be a beginning or budding radiologist, if there is a lot of radiation safety work that needs to be done. It's not a high-demand occupation at this point, but will increase in demand, I think, as hospitals begin to examine their functional problems.

Next is Dolores Tarter. She has her master's in Higher Education from UCLA. She was a secretary while getting herself and her husband through school. Her husband is a biostatistician so she has a relationship with both fields. Dolores is going to take over the Medical Records Technician programs and the Medical Secretary and one field to which I am not sure we have paid enough attention--the Office Assistant outside the hospital. By this, we mean the girl in the doctor's office who needs a little bit of many skills; she is secretary, she is a bookkeeper, she does urine analysis, she does bloods, occasionally she will give you a shot. Dolores is going to talk to some doctors and some educators and perhaps we can round up a nice training package for this girl. There are an awful lot of these people in the field and we really don't know what their training is. Some of it, incidentally, comes from a home study course from the various medical societies.

The Opthalmologists have home study courses for Ophthalmic Assistant; these usually are Registered Nurses who work in Ophthalmologists' offices and they send for home study courses to acquire basics. It might be a nice area for us to get into.

In the Los Angeles schools they have been working on something called an Optometric Technician. They had a little trouble recruiting, and I understood why after they told me what this Optometric Technician does, because she really is an office assistant with some professional skills. To me, the word, "Optometric Technician,"sounded like a man. If I were a girl going to a junior college looking for a career, I think I'd want the name changed. But this is a hard field to define and it may be that what we talk about is Office Asistant with additional modules tacked on; we give them basic skills and then talk about a six week course to pick up this kind of skill that she is going to need in this particular job. Maybe this is one place where we can all innovate together.

Pat Thouin is a NDEA Fellow at USC, getting her doctorate in Health Education and Public Administration. Pat will work with the Therapy and Rehabilitation fields. These fields have some interesting problems that she will get into, and that you will get into in your own localities. You may decide that a PT Assistant program is a great one to go for, but the PT's don't, at this point in time. With you and Pat and us working, and with the PT Association, maybe we can begin to help them realize that a PT Assistant isn't going to leave them wide open for lawsuits and the PT Assistant does have a place. The Occupational Therapy group is ready to begin work on Assistants. If in your areas you have hospitals with OT departments, the Occupational Therapy group is working with Assistants.

We do not yet have a dentist. The School of Dentistry is recruiting for us and there's somebody coming in next week or the first week in December from Chicago. Dentistry is an interesting field, since most of the people available to us will be ex-service men. They are the only ones who can accept the salaries that we must pay if we hold to the University of California schedule. So the person who is coming here is a man who probably has had 20 years' experience with the Navy and is ready to retire into a job at the salary we all make, which is not what dentists make. Apparently, there are plenty of such persons around; this is the second man the School of Dentistry has mentioned to us. They will help us recruit him and he will have a dual or joint appointment in the School of Dentistry and with our project.

Another area to be selected is the Community Worker, including Community Health, Community Mental Health, the Social Worker Assistant at the two-year level. Many of these are emerging occupations. When I talked with Dr. Affeldt, he asked, "How broad is your concept of health?", and my answer was, "I hope it's as broad as yours." He asked, "How about the Admitting Room Worker, the Financial Screener?" These are essentially social work as well as business oriented entry level positions that we haven't thought about too much. Social Workers have gotten down from the MSW level to talk about bachelor's degree people, and I have an appointment the first week in December to talk about using an AA-level person. Many of the functions of the Social Worker can be covered by that and far less, as we are discovering in various community programs around the country, and we hope that you, too, will get involved. Thus far, OEO Health Centers in many hospitals are using indigenous aides who do much of the work of family contact and interpretation of the medical care field to the patient, making sure Johnny keeps his appointments, and all this kind of thing. It really doesn't take the skills of the Social Worker, who is freed to apply herself to the more complicated fields. We will be getting someone to cover this field, and will be talking to several people. Most likely at this point is a young woman, Mrs. Munoz, working with the Venice Service Center, who has a Master's degree from the UCLA School of Public Health, in Community Planning, I think, or Health Planning, and who has been a Social Worker.

Last on my list is one that we are delaying. This is Ophthalmologist/ Optometry. In my last contact with an Ophthalmologist, I asked, "Do you think I can get you to sit across the table from Optometrists and talk about the kind of young person you want working in your office?", and he said, "No". So we may run this one occupation with two advisory committees. It sounds, when you talk with them, as if they want the same kind of girl. And then the Optician group is one on they are pretty well in agreement, but we are going to delay with them.

Our plans, then: since I joined the staff in September, we have recruited staff. Our staff will be beginning to examine fields, to be in touch with all of you, hopefully, to get your help in what's going on. We don't want, as Dr. Anderson said, to invent the wheel a second time. So we do want to get all the materials, or at least know what they are, that are available in each field in which we are going to be working, because if there is a good multi-media package, or if there is a good textbook, we are going to start with that. With your help, we will use them to pinpoint the gaps, to determine what more is needed.

The other place where we will be working is in refining or trying to find out what's going on in the field of task analysis. In the health fields, this may be somewhat different from the standard Department of Labor field procedure. One of our first jobs is to find out what the variation is, and decide how we will go about our own task analysis. Having done that, the job of determining objectives becomes fairly clear; and from the objectives, working with you, we will try and devise instructional packages. We hope you will help us test packages, give us your ideas on packages, even work with us to develop some of the packages, as we are moving along and looking forward to working with you.

Mary Jensen, Associate Director for Nursing Occupations: In trying to think about what I might say to you people today, I began to review the objectives of the Projects; this has given me a format for my activities to date. I am certain you have reviewed the Abstract of the Proposal which we sent to you, and out of this you will probably find that some of the things I say will be rather familiar. We also have for you today, a copy of the transcript of our first National Advisory Committee meeting. This will give you some background information and we will see that you get those today before you leave.

Just to refresh your minds--the objectives of the Projects, which really set the objectives for me and Nursing, were in the area of developing modern innovative effective curriculum materials, and also to provide for updating and dissemination of these materials. The activities which were dictated by these objectives were in the areas of occupational task analysis and the development of appropriate curricula--and again, I stress the innovative aspects of this--the experimental testing of packages, teacher training workshops, and the establishment of centers for gathering and disseminating these instructional materials.

When I came in August, I began to try to get acquainted with the Project, getting acquainted with Nursing as it is practiced in this part of the country, the educational programs in this part of the country and trying to review literature in the current practices, not only in nursing, but also in education that would be appropriate to the Project; also, to appoint a Nursing Advisory Committee which would guide and direct us in our thinking.

My activities, then, took the form of visiting hospitals and colleges in the area, to get acquainted with the people, to try to find out what they were doing, how their patterns of nursing care and nursing education were set up, and also, of course, to try to meet some of the people, because I think that working with these people is terribly important if you are going to be successful. Of course, I wanted to talk to them about the Project to determine their ideas, perhaps opportunities for them to cooperate by helping us to develop materials and validating them.

I also wanted to find out what they wanted particularly in the education programs, and what were their curriculum practices, where there was any sign of innovation for the use of new materials, the use of behavioral objectives in determining their curriculum. Up to the end of September (when my classes started) I called at 13 colleges and eight hospitals and I still have several to visit, which I plan to do in December.

I think results of these visits met my objectives. I found many of the same kind of concerns we have in the Middle West, both for nursing education and nursing practice: Where are we going to get enough people? How are we going to prepare them?

Much to my disappointment, I found few spots of innovation. By that I mean not only newer materials, but also the use of any kind of behavioral objectives. This does not mean these people are not doing a good job. They are turning out good products; and they are concerned about newer methods and materials and of course, the behavioral performance goals. At the same time that there wasn't a great deal being done, there was a great concern for this and a great interest in doing it. People cited shortage of time and lack of the money involved as obstacles to anything too extensive in the way of revision.

Once they got past the notion that I was an evaluator, these people seemed very interested and eager. They readily shared some of their thoughts, their fears, their concerns, and their great interest in participating. They want to progress and make nursing education more effective. They want our help in getting started. I'm sure you understand that by "they", I mean nursing directors, presidents, nursing educators, the people in the hospitals, and so on. They were very willing to share whatever they had in the way of curriculum materials, course outlines, and this sort of thing.

In addition to the visits, I have initiated quite a bit of correspondence with nursing educators and people in nursing practice in other parts of the country. I found much the same interest and desire to work with us.

I have only begun to research the literature, not only in curriculum, but on need. This kind of thing has only begun. Many publishing firms are just trying to get into the act of preparing bits and pieces of material, just as some of the colleges are getting at smaller segments.

As a result of my contacts and reading, it is obvious that the greatest need in the nursing field is for practitioners. This month's issue of the Occupational Education Bulletin puts the RN at the top of the list of personnel in short supply, followed by the LVN, the LPN, the Aide, and then the technicians who work in the operating room and this kind of thing.

So there is great need in all of these areas.

One of the last things I have done has been to appoint an Advisory Committee to the Nursing Occupations. We have eight individuals from all parts of the country who will be meeting with us in Los Angeles on December 3 and 4. We hope at this meeting to arrive at a decision as to which of the occupations we are going to pursue first of all within the nursing area--in other words, to establish some priority. From the calibre of the group, I believe this is a reasonable goal for us to attempt.

Where the future of the Project is concerned, it certainly will be guided and directed by the Advisory Committee and by our own staff. We want to select occupational areas; we want to move into course development, the statement of goals and objectives, and the devices for evaluation, the media, and the materials.

I might add that development of media and materials will be done when our exploration has revealed that no other materials exist; and then of course, these materials must be validated. We all know that our work does not go on in a vacuum so we will be involved with all of the other Associate Project Directors on the staff. We will all be involved in trying to find the common cores, the career ladders, in some of the new technologies that are being utilized so much. We are, of course, concerned for the men and women whom we hope to draw into these programs, be they the usual run of candidates, or perhaps disadvantaged in some way.

Chairman: I'm sure you all have gathered from the presentations and comments that the Project planning going on is definitely of national scope. Sometimes when we hold meetings in California or at UCLA, there is a Statewide commitment, but all of the speakers have made it clear that we are planning nationally. We are postponing the Chicago report scheduled to open this part of the meeting in favor of another that seems more appropriate for this morning--it concerns the program now going on at Delta College in Michigan, and I am calling on Martin Wolf.

Dr. Martin Wolf, Director, Research & Development, Delta College: I have some repro material* to distribute, and I hope it will appear in the record that for the third consecutive time Delta was able to limit its printed material to one page, exclusive of the appendix.

I'd like to update the many persons here who were not present at the first League meeting. In 1966, Delta College was given a grant of $142,000 for the nurse training program. This was before passage of the Allied Health Professions Act. The grant was issued for two purposes: to develop materials to teach certain types of nursing in the Associate degree program, based on some of the work done by Sam Postelthwait of Purdue, and to set up a National Demonstration Laboratory at Delta College to be used by nursing educators throughout the country.

Now, it is two years later, and the first objective has been accomplished. The college is getting ready to apply for a second grant. What we developed was series of single-concept films [shows reel]. This is a self-winding loop in color running about 3-1/2 minutes. All the materials

*See Appendix B.

were developed by the nursing faculty and the TV Department at Delta College. Originally, there were 96 films. With the permission of HEW, we contracted for publication of these films by Prentice-Hall. The films are now in production.

We have used these films as part of a multi-media approach including such things as 16 mm. films, slides, audio tapes, small and large group assemblies (as we call them). These audio-tutorial materials are primarily pre-clinical or supportive clinical materials for the nursing student.

The proposal that we made a year ago was to provide the colleges in the League with a set of these films. I have a commitment from Prentice-Hall to lend one set of the films to each of the League members. The set consists of 75 films, whose names are listed in the appendix to the summary that I passed out. Unless you are a nurse educator the titles won't mean very much to you. The first sets of films to be produced will be distributed to the League members on a loan basis. The full set is to sell at about $1,500 retail, so we'll have approximately $16,000 worth of films to be distributed to interested League members.

We don't have a projector available so I can't show you what they look like, but I'll run some for you tomorrow morning. There is no sound. A teacher's manual accompanies the film and explains what is being demonstrated. The films were purposely produced without sound to increase the flexibility with which they could be used at appropriate points in the instructional program.

Now, we have a proposal to lay before you. We would like to have a conference at the National Demonstration Laboratory at Delta College on Friday, January 31. We've scheduled this for Friday for the benefit of people who might want to spend more than one day with us, and who could stay over to Saturday without interfering with classes.

What we are suggesting is a one-day conference workshop, where in the morning the participants would be able to see the Demonstration Laboratory in action, because the students would be there the first part of the morning, and then use it themselves, taking part in the audio-tutorial approach as we use it. This would give some idea of how it is to be a recipient of this type of instruction.

In the afternoon, I am suggesting a workshop in which each League member could plan three things: (1) the utilization of the films on their respective campuses--and there are several ways they could be used aside from the ways in which we use them; (2) evaluation--and this is a crucial point and the main reason why Prentice-Hall is willing to lend us $16,000 worth of films. Prentice-Hall would like to have these films evaluated, and so would Delta College, since we developed them--some kind of meaningful evaluation to really answer one question: Does the series support the instructional program for the Associate degree nursing program? Is it any good?

We have, of course, assumed that the films are good, and we have used them. People have come to the college and visited the Laboratory and when they have seen what we have, the one question they have asked is, "Where can we get our hands on these things?" The National League for Nursing said the same things. We have had people from every state in the country visit the Lab; and the reaction of nursing people is, "We've been waiting a long time for something like this."

Nevertheless, we still would like during the afternoon of that workshop to develop some evaluational procedures that all the colleges could use to test out the effectiveness of these procedures in their own programs. And, finally, a feedback system to be determined at that workshop, so that the experiences of all the League colleges can be consolidated and then reported back both to the League and to Prentice-Hall. I've told them I'll make the results of the evaluation available to them, and they certainly are interested.

The films will be out in the middle of March. They will be on the market by the end of March, 1969. It may be earlier, but I am giving you an outside date to forestall disappointment.

So this is our proposal and we would like to get some reaction to this from League members. We would like each member to send two people to this workshop. We are limiting it to two, although in some cases perhaps you could send three, because the Laboratory will be a little crowded when you get past 25 people. We would like each of the participants to have an opportunity to get into the audio-tutorial situation and feel what it's like to be a student in that type of situation.

We are recommending that you send your academic Dean or whatever he is called--your Dean of Instruction - and the Director of Nursing, if there is one. By the way, I'd like to know if any of the colleges represented here does not have an Associate degree nursing program?

Unidentified speaker: We are just getting into it, but we don't have the degree. We have a long history of the LPN.

Dr. Wolf: This can apply to the LPN.

Dr. Johnson: When you talk about limited facilities, are you talking about two from a district, or two from a college?

Dr. Wolf: I guess we mean two from a district.

Dr. Johnson: For some of our larger programs, would it be possible to lend two sets of film to a district?

Dr. Wolf: I think so--except that in some of these districts in California they have six or eight colleges, and I'm not sure we could borrow another $10,000 or $15,000 worth of films from Prentice-Hall.

Unidentified Speaker: Will the people who attend the workshop be seeing the films for the first time?

Dr. Wolf: Not necessarily. Some of the people in the room already have seen them. Some of the colleges have visited the Lab and spent several days there.

Dr. Johnson: Wouldn't there be some way of structuring the session so that you could have two groups, and so take care of 40 or 50 visitors instead of only 25?

Dr. Wolf: I think so. It would take a little manipulation, but I think it can be done. What we might have to do is get our students out of the laboratory on Friday.

Dr. Johnson: I have a feeling that some of the districts would prefer to send three rather than two.

Dr. Wolf: Perhaps the answer, then, is a two-day conference, starting on Friday morning, January 31, and running until some time Saturday afternoon. This is our proposal. We'd like to get your reactions and to answer questions about it.

Unidentified Speaker: You indicated that there is an instructor's handbook for use with the films. Is there anything an individual student uses, since this seems to be designed for individual work--I mean, some sort of written material?

Dr. Wolf: This is the kind of thing that would come out of the conference. We have ours programmed. We have several things besides this built into the program.

Unidentified Speaker: But you have a written outline for the student to follow that is not a part of the Prentice-Hall package?

Dr. Wolf: It will not be part of the Prentice-Hall package. It can be, but not at this time.

Dr. Johnson: At this time, are you saying, it would be a part of an audio-tutorial package?

Dr. Wolf: What Prentice-Hall will sell is this Series A--75 of these films--with a teacher's manual describing what is in each of the 75.

Dr. Johnson: What I am trying to clarify is whether at Delta it is part of an audio-tutorial package.

Dr. Wolf: Yes--a much larger package. We want the people to come to the Lab to see one way this can be used, which is part of a multi-media package.

Unidentified speaker: But you don't have sound tapes for the students to use with the film?

Dr. Wolf: Yes, we do.

Unidentified speaker: Marty, will you make available, or demonstrate, or whatever, the other media that are used in addition?

Dr. Wolf: That's why we want the conference at Delta, so that we can show you all these things at one time.

Unidentified speaker: Run the gamut--is that right?

Dr. Wolf: Then each of the colleges can make the decision themselves as to how they want to use the films. The way we use them requires an audio-tutorial laboratory, which involves an investment of several thousand dollars.

Dr. Calvin Flint, Superintendent, Foothill Junior College District: I want to ask a question here which concerns a financial consideration. There are five or six League college districts in California with nursing programs, and Seattle is close by. Would there by any way to induce you and your head of nursing, with us footing the bill, to come out here and stage exactly the same demonstration, so that we could have you for a week at some one of the institutions, where we could have three or four or five faculty members see what you're doing?

Dr. Wolf: Ideally, it could be done, and the best time would be after the third week in April, because at that time our second semester ends and it would free our nursing people for such a trip.

Unidentified speaker: You'd have to have the same kind of audio-tutorial setup that you're using back at Delta.

Dr. Wolf: It could be done at a local college--probably Orange Coast. We could duplicate one of our carrels there.

Unidentified speaker: Another possibility would be to have two such conferences--one here and one at Delta.

Dr. Wolf: That could be done. Out here, I think we could do it at Orange Coast--I've seen their facilities. Now, we'd like to know whether the other 11 League colleges are interested. The second thing is, we'll have to get some help from the League for Innovation in coordinating the conference. We're assuming at this time that each college will pick up the expenses of sending its one, two or three people to the conference at Delta.

Chairman: Marty, I think there is general agreement that this is a tremendous idea. I'm wondering whether details of the project might be worked out tomorrow morning unless some of you would like to do it now. I'm afraid we may run out of time today. The point is that here is a project that the League has inherited, in a sense, and by creative thought there have been some tremendous implications. We'll work with the League and perhaps there are some implications for what Mary Jensen has been working on.

Dr. Goldsmith: I was wondering about inviting members of the Projects staff.

Dr. Johnson: It seems to me this is a day of cooperation between the League and the Projects, and this would be a beautiful example of our work together.

I'm pleased, Marty, that you're stressing evaluation procedures. You have suggested that this might be determined at the workshop. I'd like to suggest that a design for evaluation be developed prior to the workshop, and this could be refined and put to work at the workshop. I'm sure you all agree that this is a very exciting project that will mean a lot to the League schools and to other colleges around the country. It isn't going to stop with the League, obviously.

Donald Carlyon, President, Delta College: In terms of the Projects here, we found very quickly that we are now working in a couple of other instructional areas at the college with the same kind of single-concept films. It seems to me that this concept would fit several of the areas that were discussed earlier today. I'm sure Projects staff members would be very much interested in what we've done so far, which is truly just a beginning.

Dr. John Dunn, Superintendent, Peralta Junior College District: In case I say anything that's very untechnical, I'm starting by telling you that I'm out of my field. I want to report on a project we've started, which may have been completed--I'm not sure what the status is of this moment--in cooperation with Educational Facilities Lab at Stanford University and the Hospital Association of Oakland, in the East Bay Area. This project grew out of an administrative concern for the allocation of occupational training among colleges in a multi-college district, and the recognition and realization that there was considerable overlap and considerable opportunity, perhaps, to coordinate work in a number of fields.

The project involved two approaches. One, of course, was a survey to determine not only the educational needs or the occupational needs for training in our area, but also the political climate for some of the ideas that we had. We also were testing out the medical profession in a way, the Hospital Association, and so forth. The third problem was that we recognized that one of the bottlenecks in health-related programs is the availability of clinical facilities. So we wanted to work out a better working relationship with all groups involved.

Our survey of the area identified 22 occupational areas: the three levels of nursing, medical services including rehabilitation, hospital services, clerical services, and dental--we identified in these groupings the 22 occupational areas for which we then planned an educational facility to be located, hopefully, on "hospital row" -- "Pill Hill", as we call it in Oakland--in association with all the hospitals serving our area.

The educational specifications for a health occupations education center represent a different approach from what we commonly find in junior colleges. This would take all of the clinical phase, the laboratory work, and the actual clinical experience phase into a separate facility located in the hospital area, with all of the general education courses still provided at various junior college campuses; in other words, the project would centralize in one facility all our efforts in the health-related occupations.

I say we may have finished with this phase of the project, because we have written the educational specifications, setting up all of the auxiliary service areas as well as the education areas, labs, and the rest, and have turned it all over to an architect to plan a building, although we don't have the money for a building. So that's the point where we are. The new facility may become part of our Master Plan, but we still have more political work to do. The political work is concerned with the internal pressures and forces within the college district, namely, faculties and administrators of colleges, who may not want to see this phase of their curriculum moved en masse to a central location. They are studying it, but we have completed the specifications.

These reports [shows yellow-covered document] have been distributed to everybody in the East Bay area who participated in and helped with the study, and our supply is exhausted. But we're in the process of getting more, and if anybody is interested in getting copies we certainly can make the product of this thinking available.

Dr. Flint: Is this building only for the clinical aspects of the health-related courses or will the students get their academic work there, too?

Dr. Dunn: This is primarily for the clinical and the science portions of the instructional program.

Dr. Flint: You mean, then, that students might attend any of your colleges for the rest of the programs--they would have a divided program or day?

Dr. Dunn: This is possible because our district is pretty condensed in terms of distances--you can get anywhere within it in 20 minutes of driving--and this new facility will be in the very center.

Another experimental program being developed in its very preliminary form at Laney College is summarized in this grant proposal that I'd like to distribute*. I know very little about it except that it is an effort to overcome the problem of the many different nursing curricula that we have, and an attempt to develop a core curriculum that would make possible a nurse's beginning as an LVN and perhaps ending up with a Master's degree in Health, without the loss of time that we now have in articulation of the programs for training nurses. This is an attempt to set up a program that can be evaluated in terms of its effectiveness, to see if we can't effect some changes in the articulation. It's a very complicated area, I might add. That's all we're trying to do in the Allied Health areas right now.

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* See Appendix C

Chairman: I don't believe you actually said so, John, but as I understand this particular program at Laney, it seems to imply that this might be a way of improving our work with disadvantaged students. Isn't that true?

Dr. Dunn: There are such implications within this, because it does open up avenues of advancement for the disadvantaged student, who may otherwise start at a given level and then come to a screeching halt.

Chairman: As Dr. Goldsmith was talking this morning, it seemed to me that there were a number of implications for ways in which we can get our minority students started in something where they can see the opportunity ahead and then maybe move on--not always in this type of approach, but at least they get the entry job, and they have a chance to see what the opportunities are and the changes that are occurring. It seems to me it's a natural. I don't know to what extent this should be highlighted; but I don't think, on the other hand, that we should be hiding it if it's definitely one of the fringe benefits--one of the "spin-offs" of the type of thing we're working on. I think most of us here are interested in this type of thing. I'm wondering whether we ought not mention it a few times in our reports and certainly keep it in mind.

Walter T. Coultas, Los Rios Joint Junior College District: We're working on somewhat the same kind of program at Los Rios in cooperation with the dean of the new medical school at UC Davis---Dean Pepper. There is a new junior college going in close by, and a new hospital is being planned, and the same architect is handling both jobs. The hospital, Methodist Hospital, is putting in the clinical facilities for us to use on a district-wide basis, tied in with somewhat the same thing as John was talking about.

Joseph P. Cosand, President, Junior Colleges District of St. Louis: Before talking about the allied health services program at St. Louis, I wanted to mention a few points of which the members of the League should be aware. If you haven't read David Riesman's book, The Academic Revolution, you should do so. And you should read it rather thoroughly. If you take what he says [out of context] it's going to make you angry; and even when you read the book it will still make you angry. I mentioned this book because it received the American Council on Education award as the best book on education published during the last year.

I also mention it because David Riesman is a member of the Carnegie Commission and I have met with him every two months for the past two years. He packs a tremendous weight in education. And the Carnegie Commission is coming out with its report on Federal aid to education early in December. When this report comes out, Clark Kerr is going to hold a press conference, and I would suggest that when the report reaches you, you read it very carefully, because it is boosting Federal aid to education almost to a geometric progression over a period of years. It's a tremendous increase.

There was a great deal of optimism when this started, when they thought there was a strong possibility that this money would be forthcoming. In the last few years, there has been a great deal of discouragement, and I think it has to do with several things.

I think that we in junior colleges have a role to play that we haven't played. As the only junior college member of that group, I find that the other members have absolutely no comprehension of what a community college is. I also find that each of the members thinks of higher education in his own narrow little definition. To one, higher education is research--period. To another, it is a graduate school--period. To another, higher education is a liberal arts college, which they call a university college, preparing students for graduate work. That is higher education.

Saturday morning, the president of a very prestigious university stated that there is no decent college in America where the annual program cost per full-time student is less than $3,000. It's very interesting to sit in with a group where that kind of statement is made, realizing the ignorance it reflected.

All through the report, there was inclusion of such limiting or qualifying words as "qualified" students, "able" students, "Federal funds to 'qualified', 'able'", and so on. And you always raise the question, "What about the open-door institution, which represents more than half the colleges and universities in America---your community colleges, your state colleges, and many liberal arts colleges?" There is a complete lack of understanding of this among large segments of higher education, and I'd never really realized that or had it brought home to me the way it has been brought home to me the last few months.

The reason for this feeling that perhaps Federal aid isn't going to be forthcoming is what David Riesman calls the "image" of higher education that is spreading throughout the United States with respect to the "naughty" students--and he uses the word, "naughty"--the "naughty" students, the "naughty" faculty.And he says, in effect--and as you know, he is an eminent sociologist--"Don't kid yourselves about how that image is spreading, and don't take for granted that you can go today and ask for and get those Federal funds as you maybe could yesterday, just on a carte blanche--" because, as he and Clark Kerr and others say, you're going to have to prove that you need the money to do something differently than you've done it in the past--the money simply is not going to be forthcoming just to do more of the same. And a lot of it has to do, again, with this image that has been developed.

One point that came up at the last meeting that impressed me more than anything else was to try to make our reports reflect not dollar volume of assistance, but ratio to gross national product. If aid is related to the tremendous growth in GNP and you can get this across to the public, rather than stating dollar amounts, it still is a tremendous increase in aid. Our Federal aid to higher education has been amounting to about 2 percent of GNP, and those tremendous increases in aid actually represent a growth up to about 3 percent of the gross national product. Looked at in this way, it constitutes an entirely different graph. If you graph it in terms of actual dollars, it looks like this [makes gesture showing a perpendicular rise]. So I suggested they delete those graphs from the report, and this has been done. When you talk of an increase from 2 percent to 3 percent, you have a pretty shallow graph.

I felt it was important to bring out these two points. Study Riesman's book because it reflects very much the thinking of a very large percentage of higher education outside of the open door community college, and the state college and many liberal arts colleges.

Then, one more point that impressed me quite a bit. Clark Kerr said that we junior college and community college people have moved so rapidly in our power area in Washington that we have tended to move from our former defensive position clear through the confidence area into an offensive position, which is not appreciated by the other organizations of higher education; and they are tending to get together and gang up on us. I think we ought to keep this in mind, too.

My report was prepared by a member of our staff who knows more about our allied health programs than I do, so I'm going to read it; it will limit me in the time I take. [Reads; interpolations are shown in brackets].

The Junior College District of St. Louis applied in 1965 for a grant from the Kellogg Foundation for the purpose of investigating the entire gamut of the auxiliary medical fields. A grant was received for $168,168, and staff was immediately employed.

The project was to be carried out over a three-year period. It was designed specifically (1) to conduct research into the actual needs for specific allied medical programs, (2) to develop appropriate curricula for those programs that the Junior College District deemed most urgent, (3) to design laboratories, select equipment, appoint advisory committees and in any other way initiate the programs selected, (4) to publish the results of the project for national use. [The report is in the publishing process right now;there will be a thousand copies run. I don't know how many this group may want, but I'd like to have that figure today so we can set aside the number required. I'm passing a copy around so you can have a look at it.]

Personnel for the project consisted of a director and three subject matter specialists; one in physical science, one in biological science, and one in social science. The plan was to employ the three full-time on the project for the first year, and then gradually blend them into their various academic fields as faculty members during the last two years of the project.

Six programs were selected for development: (1) Clinical Laboratory Technology, (2) Dental Assisting, (3) Dental Hygiene, (4) Radiologic Technology, (5) Medical Office Assistant, and (6) Food Service Supervision. [A nursing program was already in operation.]

The allied medical programs in the Junior College District have been incorporated into the academic division. [This is one of the key parts of our program.] This is a somewhat different approach. The academic faculty and the technical faculty are one faculty. The students in the technical programs and the academic transfer students intermingle, and insofar as possible are enrolled in the same classes. The same counselor is available to all. There is no distinction between technical and academic students and faculty; in fact, it is somewhat prestigious to be in an allied medical program.

The core curriculum is probably the most talked-about but the least demonstrated concept in allied medical programs. A very strong effort is being made in this direction. The following courses: Chemistry of Human Function, Communications, Social Relations, and Technical Mathematics--have been designed for this purpose. In addition, Anatomy and Physiology, Microbiology, American Civilization, Sociology and General Psychology are shared by a number of the different health curricula.

Clinical Laboratory Technology is a two-year program. The existing programs at the present time are all one or four-year programs. The Junior College District has been encouraged to establish a two-year course as a pilot program, since there is a great need for personnel with this intermediate type of training. We have been assured that a new category and registration will be developed for our graduates. [I think, Dr. Goldsmith, that this hints at some of the things you said this morning,] and that the assignment of this registration will be retroactive for any graduate completing his work before such a position can be officially created.

We are in the process of developing a new curriculum for the Dental Auxiliaries in which a student will proceed from Dental Assisting to Dental Hygiene, to a new proposed, more advanced category of Dental Nurse, with a minimum loss of credit. The Missouri and St. Louis Dental Societies have viewed this proposal with considerable interest.

The Radiological Technology program, we believe, was the first to incorporate both the academic and the practicums into a concurrent course of study. In most programs, the student takes the academic courses at the junior college and then follows this with the practicum in the hospital. Our students take the academic courses at the junior college but at the same time are assigned to hospitals in the area for their practicums. They will each have had 2,400 hours of practicum in the hospital by the September following their graduation. This is possible because the junior college has the X-ray equipment in its laboratory on which to teach techniques and positioning before assigning the student to the hospital.

A program to train Medical Office Assistants is offered. We are now engaged in revising this program so as to shift the medical or clinical part of Medical Office Procedures to the first semester, and the office or filing part to the second semester, so that student who takes her clinical procedures in a doctor's office during the second semester will already have had some clinical experience.

The Food Service Supervisor program is designed to train food service personnel largely for hospital organizations. This program is in the first year. We expect that when we move from our rented facilities in the Ambassador Hotel to our own kitchens in our Student Union in September, 1969, the Food Service Supervision instructional program will be greatly expanded. [I should explain that this program has been brought in and coordinated with the Hotel-Motel-Restaurant program which we already have. We have been able to expand that to include this other program which fits in with it, and really, what we've done is simply broaden the basic program into two different parts.]

Modern laboratories and excellent affiliations are available in all areas. The clinical laboratory was designed and built, with the aid of consultants, specifically for this purpose. Ten students will complete the Clinical Laboratory Tech two-year program this year. These students spend each morning in class on the campus, and each afternoon (a total of 16 hours a week) in the hospital. St. Luke's, Missouri Baptist, and Veterans Administration Hospitals provide the affiliation. They have been extremely cooperative. Scarcely a week passes without another hospital calling to inquire about the possibility of affiliation with our program. [There are some 32 hospitals in St. Louis.]

In connection with the Dental Hygiene and Dental Assisting programs, the facilities in the dental laboratory and the dental clinic certainly are among the best to be found anywhere. The mobile dental hygiene units were designed especially by our faculty and have proven to be so unique and so functional that they are being copied by other institutions. [I have two pictures here which show the kind of equipment that we have designed for the dental lab. I suggest very strongly that if any of you are interested in moving into a Dental Hygiene program--I am not talking about Dental Assisting now, but Dental Hygiene--you send somebody out to look at these facilities. They are tremendous, and the pictures show this new type of approach when you are treating a patient for cleaning teeth and that sort of thing.] The unit is the only one in service that controls all different types of rotary and ultra-sonic hand pieces with one foot control. This complete cabinet unit has the complete set of equipment and store of supplies at the finger-tips of the student hygienist. Special emulsion dip for lubrication and special bags for autoclave sterilization are used.

Also unique among educational programs is the "12 o'clock" position for Dental Hygiene, which improves visualization and operator work posture and also permits the patient to watch with a mirror. [You'll notice that the patient's head is in the lap of the hygienist--that's the "12 o'clock posture".]

The dental demonstration room, with its raised seats and "dental office", provides an excellent opportunity for observation and demonstration of dental techniques. [In other words, our dental chair is up on a platform so that the dentist can work up there and the students around him--it's more like a surgical laboratory for observation purposes.] Closed-circuit television in this demonstration area will permit a close observation of procedures carried on inside the patient's mouth.

The dental clinic is in operation daily from 10 a.m. to 1 p.m., and attracts patients from the community. [We got into some trouble on this dental clinic with respect to charges. We checked with Washington University and St. Louis University on the charges they were assessing in their dental clinics, and with our Dental Advisory Committee and our staff, and agreed on the fees we should charge. Then it hit the newspaper and all hell broke loose because we were charging lower than Washington University, lower than St. Louis University, and the Dental Association thought those charges were low enough. What really tore it, though, was that the article stated the students and faculty members from our district would get lower rates. Well, all I can say is that we didn't handle that one very well. I suggest if you get into this, you handle it a little better. We had to placate an awful lot of dentists. The dentist who heads up our program was in charge of a top program at Washington U. and we were able to get him to head up our total program, and boy--did he get unmitigated hell! We learned a lesson. When you start talking about charges for your clinics, talk to more than a little local group, will you? Talk to the Dental Association before you do it.] Special groups from Community Centers, the Human Development Corporation, playgrounds and settlement houses, also have provided patients. A special arrangement also has been worked out with the Job Corps for treatment of their trainees.

There are currently about 70 students in the dental programs: 20 in Dental Assisting, 20 in the second year of Dental Hygiene, and 30 in the freshman year. This is at Forest Park. [We also have a Dental Assisting program of about 25 students at the Meramec campus. So we have a total of almost 100 students in dental education of some sort.] The cost of equipment for the Dental Hygiene laboratory [and believe me, we're only going to have one] was about $100,000. Affiliation with dental schools, the dental offices, and cooperation and assistance offered by the St. Louis and Missouri Dental Societies has been outstanding [except for this fee business].

The growth of the Radiologic Technology program has been rapid, as has been the growth of all the Allied Health programs. Eleven students enrolled the first year. Of this number, five probably will graduate. No selection of students was made with this first group and the high attrition rate suggests that some screening of applicants probably is desirable. Twenty-seven students enrolled in the new class in September.

Equipment in the Rad Tech lab consists of the complete X-ray, "Bucky table", which tilts to 90 degrees, and the control panels. The equipment simulates every procedure except for the taking of a "live" X-ray. It permits the students to practice positioning and all other procedures, before they go into the hospital for their clinical experience.

Jewish Hospital and Mallinkrodt Department of Radiology have provided the practicum. Up to this point, they have not charged the college for this instruction, but beginning in September, 1969, they will charge us 46 cents per student per hour. The X-ray equipment in the college laboratory that I talked about is valued at more than $15,000.

Although Nursing was not developed as part of the Kellogg research program, it is still a very important and integral part of our allied health program. At present, we have 152 Nursing students at Forest Park, and about 100 at Meramec.

At Forest Park, the first class of students, numbering 27, was graduated in 1967. The 1968 class numbered 34 graduates. At present, there are 53 students in the 1969 class, and 99 in the 1970 class--all this at Forest Park. All but three of the graduates have taken and passed the State Boards for their registry. The graduates currently are practicing nursing in 14 hospitals in the area.

The nursing laboratory designed by our faculty with the aid of consultants is especially functional. In addition to a large, divisible classroom that can house a class of 100, the nursing lab has a fully equipped medication station comparable to the best of hospital facilities. A utility room and charting station are included. Completed by a fully equipped hospital room including a shower and toilet, the nursing laboratory is unusually flexible, functional, and compact because all normal hospital facilities are replicated in a divisible but contiguous teaching space. Closed-circuit television will be installed soon.

Seven hospitals are providing clinical affiliation[to this one program. When you take our two programs, we have contact with more than 13 hospitals.] In addition, we provide academic courses for 200 students of nursing from Jewish and Barnes Hospitals.

The junior college district continues curriculum development and implementation with the assistance of its advisory committees. At present the most urgent need in the Allied Health field in our area appears to be in Inhalation Therapy. We did not develop a program earlier because there have not been enough Registered Inhalation Therapists to teach it. The need is great. There are about 7,000 hospitals across the country, and only 600 Registered Therapists. A large hospital, such as our Barnes Hospital, could use 15 or 20 such therapists right now.

Since, beginning in 1970, an Inhalation Therapist will not be eligible for registry without an Associate of Arts degree, it is imperative that the hospitals and junior college reach an agreement on such a curriculum. No special equipment is needed since it all is available in the hospital. Certified hospital therapists would probably have to offer the practicum under the supervision of the junior college district.

Other curricula that have been identified for possible future implementation include: Chemical Research Laboratory Technology, Dental Laboratory Technology, Hospital Unit Service Manager, Medical Record Technician, Optometric Assisting.

Dr. Norman Watson, Superintendent, Orange Coast Junior College District: I'll try to summarize some of the things that are under way at present in the Orange Coast Junior College District, and then ask Bob Moore if he would like to comment further. Our interest in the Allied Health field certainly far exceeds our accomplishments. However, I would like to report to you that we have received two allied health grants. We got into this as a result of a rapidly burgeoning series of programs in a number of different areas and a desire on our part, then, to attempt to coordinate these and to see whether we can identify common cores and common experiences, and maximize the opportunities for students.

We had Nursing programs, of course, and have had them for some time. We went into the Radiologic Technician program and also have had that for some time. Dental Assisting also is an old program for us. The Dental Technician program is relatively new but very successful. Our Medical Office Assistant program is relatively new. A Food Supervision institutional program is another which has grown rapidly during the last three or four years and is quite successful.

A program for Social Workers and social welfare individuals has recently been started, and also one for Recreation Therapy Assistant. We now are exploring the area of Psychiatric Technician.

This, I think, explains why we found it advisable to request allied health grants, to pull some of these things together and see whether the directions we were following were appropriate to the needs of students. One of the things we discovered as a result of the allied health grants is that there seem to be cores that are common among the various programs we have.

Among our Nursing faculty there is a high degree of interest in the use of multi-media for nursing instruction. We have one new health facility under construction at Golden West College at the present time. This will have located within it a multi-media laboratory, including closed circuit TV, so we will hope to proceed quite rapidly with the development of software and the development of support material for the Nursing areas.

We also have the audio-tutorial program in Biology, which, again, is a natural cross-over with nursing and the other health areas. We also have on the planning boards at Orange Coast College a new allied health facility which will be closely allied and closely supported with a new science and mathematics facility. We hope to identify certain associations of curriculum which will be located at the Orange Coast campus and certain other associated curricula to be located at the Golden West College campus, so that both colleges will have certain Allied Health programs, but not necessarily duplicated. This is the kind of procedure we are following. Bob Moore, do you want to add to that?

Dr. Robert Moore, President, Orange Coast College: I speak as president of a college, and not as superintendent of a district, so I can see it might be a little confusing to you. As Norm said, we qualified four programs for the Allied Health Professions grants. We have continued to qualify. Requalification becomes a little more difficult because there is a difference in growth--it involves a commitment on the number of full-time students enrolled in the second year;and so many of our students tend to become part-time students, particularly by the time they get to the second year, that it presents quite a problem.

Dr. Watson: We had a big question to work out at the start of our qualification, when we found we might have funds under the $160,000 grant from Kellogg. We found that we were eligible for $9,000. It was possible for us to take and use that money because we had in our Food Service program a director who was a dietitian and had an excellent background; we were able to ask her the questions and she was supposed to give us the answers. The questions and answers were not much different from what Joe Cosand's were, and I hope that his report will be helpful to us. I know Mrs. Woodward, our Director of this Allied Health Professions project, has corresponded with different schools relative to the problems in these areas --with Delta and others.

You have to understand the Orange Coast College situation in terms of the fact that the Nursing program will move to Golden West College next year. As a consequence, we then have the Allied Health professions in the sense that qualifications for the grant remain at Orange Coast College; but the whole Nursing program goes to Golden West.

In the development of this program we are using multi-media; this year we are assigning multi-media specialists on a part-time basis to Rad Tech, for instance, so they are developing procedures that are not too different from what Delta has in terms of the single concept films and video tape and the like. We are looking more closely than they might be, possibly, at the microfiche and microfilm as a means of working in this area.

We are finding that there is a very close relationship in the Allied Health Professions field and in our fields of the Biological Sciences and at the Technician level, particularly in Marine Technology. Every time we get the Marine Tech people and the Allied Health Professions people together, we have talked about cores, because it always is expensive to try to have single programs for a single major. We find the Marine Technician always gets into the act because he sees a very close relationship with some of the problems in water and water purification and the like; and that field also is concerned with the health of people.

It is very nice to have an opportunity to sit and talk with you folks and hear what you are doing. It is remarkable to find the many parallels that do exist.

Dr. Flint: I don't think we have anything unique in the way of programs. We do have one of the Dental Hygiene training programs in the State of California. I mention this because at present there are two of them and soon will be four. (Or perhaps there are three now, and soon there will be four and finally a fifth). All of them are in Northern California, by the way. I mention this for the benefit of you who are from out of state. We had to associate ourselves with the University of California Dental School, or the Physicians and Surgeons in Northern California, to put in this program. In Southern California, we are informed, those colleges that have attempted to institute the Dental Hygienist program have had opposition from the dental hygienists practicing in the area, because apparently they feel they have a closed corporation and do not want their control broken. Actually, we are turning out students at this moment in Dental Hygiene who move to Southern California and immediately get jobs--starting jobs--at $900 a month, just the moment they finish our two-year program. So it is a popular program.

I'm not trying to list the programs we offer, but I think we have about the same number as many schools, perhaps one or two more in some areas, than other junior colleges within the State. I would like to point out two things on which we are moving, but not because we thought of the idea (I wish I could say that we had already developed our programs and they are under way). We happen to be located virtually next door to the Palo Alto Medical Clinic. I believe this is the second largest medical clinic in the United States--second only to Mayo. It is headed by a man, Dr. Russell Lee, whose son, Dr. Philip R. Lee, heads up health activities (as we know) in Washington, D. C., and is a very good man with whom we keep a very close association. Dr. Russell Lee is very much concerned about the potential of the medical profession to take care of the medical needs and the dental needs of an expanding population.

And as an outspoken leader of his advocacy, he has been listened to in many places. He feels there must be something done in the United States to permit training on a two-year basis in those areas of the Allied Health Professions that can be done by the junior colleges--maybe with some clinical assistance. Consequently, he has set up a project--Phil Lee has been cooperating on it--working with Stanford University from the standpoint of some of the clinical phases, with Foothill College as the junior college in the project, where they will begin the pilot programs, the experimental programs, in some of the areas such as, say, Physician's Aide. It is his conviction that the average general doctor in his office (I don't say the hospital now) can have his time with a patient reduced by at least 50 percent if he has such an Aide at his side. Which means, automatically, that he can spend twice as much time with twice as many patients.

The automation of which we have already heard from the standpoint of diagnostic approaches, and a great many other activites, as he would specify if he were here to explain it to you, can be handled by a Physician's Aide, a Doctor's Assistant--whatever you call it. These persons, along with the Clinic and Stanford University's assistance, would go through training for two years in the junior college and then for a third year either at the Stanford Medical School or primarily with the Clinic, for one year of clinical experience. After this, they would come out with some kind of certificate that would qualify them for this sort of position--a position in which they'll be allowed to do much, much more than they are allowed to do, or that nurses are allowed to do, in the State of California.

I think we all are familiar with the pilot program on Nursing which was conducted here in California, so that we could offer training on a two-year basis. What Dr. Lee has in mind is exactly the same kind of idea, and one which, I believe, will be implemented.

Dental Hygiene is another area about which he is talking, even though he has nothing to do with it. We've got to get the State of California to face the fact that this training can be provided on a two-year basis. The Lab Technician is another--and I'm not trying to say the training can be done in two years--I'm simply talking about the people such as Dr. Lee, who contend that practically all of their laboratory work, under a person who is a professional leader, can be done by people properly trained in two-year programs, instead of the five-year programs we have now. So this will be at least experimental, if not innovative.

Dr. Johnson: I'd like to make a comment on Cal's presentation. It seems to me that one of the values that can emerge from our sessions today is to identify persons, leaders, persons with whom we might be associated either individually or through the League. I think Oscar Shabat mentioned such a person in Chicago, and now Cal mentions a Dr. Lee, and Joe Cosand, you mentioned Dave Riesman; and I am wondering about having Dave in for a session with us. It seems to me that as our day goes on we may identify several such people that we would like to draw on.

Dr. Goldsmith: We may be able to use them in more ways than one. We have to be very cautious -- I am hoping both Foothill and Dr. Lee will keep this in mind--that we don't train people on whose behalf there will be a terrific battle. This would mean taking a junior college person and placing him in a position where he is going to have to fight for his job; and you and I both know how hard it is even though we have a little more experience doing it. So when we set up new programs, let's try to be sure the community is ready for this kind of person.

Another problem that comes up is the question of how we train a two-year person to know his own limitations. This arises when we begin to teach people more and more patient care, patient contact, without paying attention to "this far you go and no further." And it might be something we consider as we talk about curriculum content.

Dr. Flint: May I say in this regard that the County Medical Association has approved this approach for the Physician's Aide or whatever you may call this person. Actually, it appears that if we could start the program right now, the physicians probably would take 70 or 80 the first year--we could place them that rapidly.

Inhalation Therapy was a place that we weren't sure we should get into. I guess we were the first junior college west of Chicago to go into it. Suddenly, we find that the demand for these people is very great--under professional leadership, of course, and I emphasize that.

Unidentified Speaker: You're not necessarily talking about the Physician's Aide as a licensed occupation, are you? Oh, you are. Then it would create some license problems.

Dr. Flint: It isn't one step different than that of the nurse. And then we have the example of the other position--I didn't say necessarily higher--the Dental Hygienist, where the doctors in our area were not willing at first to take the two-year trainees from California, and now they are begging for them. So I think that when they're under professional leadership, I'm not worried about that phase.

Unidentified Speaker: As for the battles of the Associate degree program, we would have them in this field or any other brand new field.

Dr. Cosand: I think Lamar's suggestion about our collection of names, to which we could give our attention tomorrow, has a number of different offshoots for discussion.

Chairman: I'll add that to the agenda as "talent search." We now have finished five reports from community college districts. We'll start on Item 6--Los Angeles City Junior College District. John Grasham is going to report instead of Stan Warburton.

John Grasham, President, Los Angeles Southwest College: When he had to leave the meeting, Dr. Warburton put this folder into my hands, so I guess I'm reporting for Los Angeles. He asked me to pass out materials on our activities*--I have the Dean's Honor List, and some copies of materials on the Allied Health Programs that are taking place in Los Angeles.

We have seven colleges in the Los Angeles district; an eighth will be opened in February. We have Allied Health Professions programs in six of our seven colleges. City College, the longest-established institution, has several of these. Altogether, we have 17 different programs in 24 different locations. The highest frequency of programs is in Registered Nursing, which is offered in five of our colleges. The second highest is the Licensed Vocational Nurse program. Probably the smallest of the staffs offering a Registered Nurse program is the one we have at Southwest--only three instructors. Some of our colleges may have as many as 12 instructors devoting their full time to the teaching of Nursing subjects.

We will be opening a Prosthetics-Orthotics program at Southwest as soon as the facilities are completed. We have an Inhalation Therapy program going at East. If you now have the list before you, you can see the variety of programs, from Ophthalmic-Optics and Ophthalmic Assistants at City, to Dental Assistant and X-ray Technology and others.

On Page 2 we have a note on some of our grants. City College has a continuing grant in the area of Dental Technology and Radiologic Technology which has provided about $100,000 worth of supplies and equipment. I am told that an X-omat, which you see listed, is a high-speed X-ray device and I understand that a phantom is a plastic dummy. City Colleges has a grant of $9,000 to provide loans for nursing students. East Los Angeles has a $3,000 grant in Inhalation Therapy. Los Angeles Trade Tech. has requested $12,000 to conduct an experimental project for the upgrading of Licensed Vocational Nursing curricula and practice.

Interest in the Allied Health Professions is high in the district. Pierce College has applied for the addition of Registered Nursing, I understand, so by next year we should have seven of our eight colleges involved. What West Los Angeles will do I cannot say--they take their first students in February. Insofar as Southwest is concerned, we have a real interest.

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*See Appendix D

Dr. Cosand: Have you any evidence of concern among your staff and your Board about the amount of money you are spending on Nursing? In other words--and we are facing this problem in St. Louis--how big do you feel the tail can be that wags the dog?

Dr. Grasham: I don't think we put any restrictions on this. We have recognized that Nursing is very expensive in terms of student contact. We use off-campus facilities extensively, and in a sense our costs are offset because some of the physical facilities are supplied. Our student-teacher ratio is very low.

Unidentified speaker: I think this is a problem many of us are going to be faced with. Cal and I talked a little yesterday about programs for students who need assistance. Nursing is a costly program. We have tried hard to maintain a balanced program. We are finding that if you put resources to a heavy degree into one aspect of your total program, you may throw it out of whack. And we are concerned about Nursing. Next year, we will have over 300 students of our own in the Nursing program. As I said last night, we have 400 in this developmental program, and another 850. We are deeply concerned about how far you can go and still maintain a balanced program. I think that this becomes a real factor in this Allied Health Professions Project that we are working on here, and I don't know the answer to it. I am concerned about throwing out of balance of total program because of the numbers you get into a costly program; and we have not yet discussed this point.

Dr. Grasham: If Stan Warburton were here I think he would tell you that in Los Angeles we have an enrollment growing at the rate of about 8 percent, and income growth of around 4 percent. The lines are intersecting; they were to intersect this year. If we don't get more funds, in Los Angeles we're really going to have to squeeze just in terms of operation, not counting the fact that we have three interim-type colleges either started or on the board--seven other colleges, or six others, which haven't been completed. So we are in a real monetary bind.

Unidentified speaker: I don't want to push this, but to me this is a real problem, as these Allied Health Services Projects get under way, that always in the background must be the question: how much can you finance in order to keep a balanced program?

Dr. Dunn: Not only that, but I think we ought to emphasize more than that. We are now in a process of developing statewide new accounting for the junior colleges which will be program-based so that we can tell in an instant what the cost will be per student for any program that we are offering. We don't know now. If we knew it now, we would have some real questions about the costs of all these programs. Not unrelated to the costs are what many of us consider to be unrealistic demands from licensing agencies, in terms of ratios of students to faculty. I think these are problems we just can't ignore.

Dr. Cosand: With regard to Grasham's point, we've done this at our three colleges--establishing the cost of English, the cost of math, of nursing--you name it. And it throws up some real problems facing us. Last night Cal Flint talked about the cost in your skills programs. We got a quarter-million-dollar grant from Danforth, you know, but we are putting in a million three hundred thousand dollars of our own money, over a three-year period. Now, it's all well and good to talk about programs for disadvantaged students, and for Nursing and Allied Health, but just how far can you go and still keep a balanced program?

Dr. Grasham: Joe Cosand, you asked a question of what the administration and board thought of the Nursing program. I think you have to start asking what the faculty reaction is going to be to the beginning of cost accounting. (That's right.) To program budget approach when the faculty can take a list and see the Nursing costs so much and English costs so much--I think we have some headaches ahead of us and unless the State and Federal governments will come in and recognize some special responsibilities.

Unidentified speaker: And we are talking about two and three times the cost per student.

Dr. Ed K. Erickson, President, Seattle Community College: But you are not talking about anything that is unfamiliar to the universities and colleges, by and large, where they have been pretty much relying on State funds. They have areas of program budgeting and we in the State of Washington have to show what these are costing, and that does not affect English and some of the other programs. We have to budget on the basis of program costs. We have had to go into this automation that John talked about in order to come up with this information. So, in our case it is different. We go into program budgeting and try to get the money from the State on that basis--what it actually costs--rather than having to take it from a pot in amounts that might be questioned by other disciplines.

Dr. Goldsmith: I think there are two things in relation to the matter of program budgeting. I worked at a medical school last year and if budgeting had been based on the number of students served, the Anatomy Department would have gotten all the money. So you turn around and justify it on other bases, which was done at Irvine, so that the clinical departments, with their lower student ratios, did get sufficient monies. This is one thing.

The other thing in considering costs may be the sharing of faculties, and I frankly do not know how you work this out with your clinical facilities. As a person who occasionally has tried to work in school systems, I find a great deal of rigidity in some schools in terms of accreditation of teachers that might be loosened up. We talk about tight licensing restrictions, and I think we have to work on Licensing Boards on the one side; but perhaps the school systems may take a look at certification plans, on the other, or hiring plans, so that perhaps these faculty members need not cost so much and might be shared with other fields.

Unidentified Speaker: We really could give a chemistry course at a better ratio than seven students to one instructor in the lab.

Dr. Goldsmith: Of course--just as Anatomy may have 200 medical students to one instructor.

Unidentified Speaker: The State Board of Medical Examiners hasn't recognized that.

Dr. Goldsmith: For Chemistry? Or for the clinical part of the Nursing program?

Unidentified Speaker: Not any of that.

Chairman: Maybe this can be one of the projects to be undertaken by the Allied Health Professions Projects.

Unidentified Speaker: Which of us wouldn't go along?

Dr. Goldsmith: This is the kind of thing we want to know.

Dr. Cosand: I am concerned, Dr. Goldsmith, that we may not be keeping this in the back of our minds all the time as you conduct your study, because we can go off into the wild blue yonder and have a beautiful thing on paper, and when it comes right down to implementation, we might be turned down across the board because we can't afford it. Getting to that point in similar programs, Ed [Erickson], how many nurses can we educate? Can we educate 500 or 300? How many can we educate within a certain framework? I think the same thing is true in a lot of these other programs. Dental Hygiene, for example. I would hate to see us get some halo effects here, where the halo disappears.

Dr. Moore: This is why I think we are almost forced into common core programs in the Allied Health Professions wherever possible, because if we don't, we can't afford to have 10 or 12 students for four semesters; but we can afford to have 10 graduating students out of a program if they have been in with 10 or 20 other students at the first and second semester level wherever possible.

Dr. Watson: Here is one thing I think should be pointed out. I remember that years ago Norm Harris used to make the comment that we should not think only about the annual costs per student (say, in the junior college). We have to take a little different look and think about what society is happy to pay. If society can get the finished product in two years as opposed to five, it's still less expensive to do it the way we are doing it. The trouble is that so often (to get back to Joe's point) we're going it alone and the individual school has to bear the brunt. Faculty, I believe, will take a different view if they know that the help is coming out of a different pot than the one they are trying to dig into. Maybe this is the whole justification. I thought that much of what Dr. Goldsmith said this morning tied into the junior colleges--the fact that we are going to have fewer people wasting valuable time--society isn't going to be paying for all these extra amounts of time that cannot be justified as far as the product is concerned.

Dr. Goldsmith: This brings up another thing. I don't know how much you people are involved in this yet, but the rest of us are pretty much concerned with cost-benefit analysis. It is going to take imagination on the part of the junior colleges as well as the users of the personnel you provide. I am trying to determine how we are going to do a kind of cost-benefit analysis for handling social problems and social activities.

Dr. Simonsen: Doesn't that relate back to Joe Cosand's point about the junior college image? The university thinks, for example, that the junior colleges are pretty second-rate institutions because, "look at the large numbers of people who go to junior colleges who never get their bachelor's degrees". We have this bit thrown up not only around the country but right here in California--the Coordinating Council for Higher Education has expressed concern because so few of our students ever get their college education completed. Of course, a lot of them don't get their AA degrees, either, and we're not worried about that either. I like that fancy term--what did you call it?

Dr. Goldsmith: Cost-benefit analysis. It's driving us crazy in the health field.

Unidentified Speaker: I think this thing may have a future--it's a very good term.

Dr. Dunn: There are several points of view possible, because instead of rationalizing the excessive costs I think we can work toward decreasing these costs.

Dr. Simonsen: One thing the Los Angeles report did not include--Joe Cosand, Lamar Johnson and I sat for years and listened to the great progress of the experimental project at Los Angeles Valley which was largely supported by the Kellogg Foundation. Remember, there was a grant--a very substantial grant--for starting that program. I don't know if there was any problem in Los Angeles Valley in terms of getting money for Associate degree Nursing.

Meyer Weinberg, Coordinator of Innovation Center, Chicago City College: We have eight campuses with a variety of Allied Health programs. For a couple of years there has been a Prosthetics program at one campus, in connection with Northwestern University Medical School. We also have had a Nursing program at three campuses for a couple of years. Since September, 1967, we have had what we call an Allied Health Center working in conjunction with Presbyterian-St. Luke's Hospital, and a group of eleven Aide programs. They are all scattered, but we are working to put them into a new central facility. Construction will start on a new campus next month; it is geographically well located for cooperation with the medical centers.

We just got an offer to rent for twenty years the building which had been used for the nursing school of the Presbyterian Hospital, and are looking into it.

One point: we have great difficulty in trying to ascertain what the needs are for Aide programs, especially in Chicago. We have national figures, so vague that if anyone really pried into them and investigated the bases for the estimates, you wouldn't want to slice them up and say "Chicago represents 10 percent of the national figure" and then go to work on that basis. The national instruments are not very good and the local estimates are virtually non-existent, and it seems to me that that is one job the University could do very well to help in this program--help work out ways of estimating local manpower needs.

We have our Allied Health Center programs in eleven areas. In our Aide programs we have about 135 students per year. This instruction revolves around the medical core concept of 28-week programs--14 weeks of classroom instruction and a second 14 weeks of theory and clinical practice.

Let me give you some idea of how many students we graduate. First of all, we lose about one-third from the Aide program--dropouts--between September and December. Considering who the students are, this would appear like a very small dropout rate. Half of them are men and women--mostly women--who are on some kind of public aid--Aid to Dependent Children in most cases. While we do have entrance requirements in a very vague sense, hardly anyone is kept out for any reason. For example, in the group of 31 students who were graduated this March, there were two Transfusion Therapy Aides, 10 Ward Clerks, and six Inhalation Therapy Aides, six Occupational Therapy Aides, one Recreation Therapy Aide, and six Physical Therapy Aides. The faculty in these Aide programs is shared from our regular facility, a nearby training campus, and of course also people from the hospital who are on joint clinical appointment.

As a State requirement, there is an advisory committee to every special program. There are all kinds of problems in curriculum construction. For instance, Inhalation Therapy Aides. Last year, when we were drawing up an advisory committee, we got in touch with the University of Chicago Hospital (Billings) and asked if they'd like to have representation on the committee. The reply, in effect, was "Preposterous! What self-respecting hospital would ever use Inhalation Therapy Aides?" Several weeks ago, we got a call from Billings asking if we had any Inhalation Therapy Aides to place. They'd changed their minds.

The question goes farther--what kind of specific course material do you need? Take, for example, physics. What is the proper component of physics instruction in the Inhalation Therapy program? Luckily, I'm in the Innovation Center, where we have a mathematician who also teaches physics and who was working in Inhalation Therapy. He was able to apply for an innovation fellowship to work this past summer on the physics curriculum--a physics course with demonstration material and so on, for that program. You ask, "Was that a great innovation?" No. But when you have an innovation center on campus, anything that never before has been done on that campus, be it large or small, is referred to it, because in terms of the campus, it is an innovation, though in fact it may not be such an advance in education.

We have had one research study so far in this area--it didn't claim to be much, and the samples are so small that it's not very reliable. We tried to get some idea of who the students are and how they place in terms of standard measures. Well, these standard instruments were not so very suitable to them, but nevertheless we discovered that it is a great mistake to regard these women (especially) or these Aides as an undifferentiated group. Some of them were very much college stuff--that is, if you consider college stuff on the basis of the standard test scores, they scored quite adequately.

There are a couple of broad questions I'd like to bring up. One is the question of the larger community framework of the Aide programs, as we need the Aide programs especially. The Aide programs are an industry--one of the lowest-paid industries in these United States--the health industry. I'm speaking not of doctors, of course, but of those who perform labor--common labor. In the black community, especially, nowadays, there is a revulsion against the traditional role of doing the lowest-paid job, of occupying the dead-end jobs, and so on. There is great danger that if you are not aware of this you will not give adequate attention to the opinion that Aide jobs are dead-end jobs. If we do look at them as dead ends, I predict they don't have much of a future, unless they are merely ways of sopping up whatever odds and ends of labor happen to be around.

I think you have to pay special attention, specifically, not to building a program for a person to start off as an unskilled Aide and end up as an M.D., but to some kind of progression--build some kind of progression into these programs. As an example--five recent graduates of our Inhalation Therapy Aide program couldn't get jobs right after graduation, so they decided to go into the two-year Inhalation Therapy program, which is good. Most of the graduates, however, went right into the particular Aide programs for which they had been prepared. But I think that this is not good enough. I think the whole field must pay attention to what is called nowadays a new career emphasis--people starting at the bottom, but moving up. Moving up is absolutely essential, and if we just become preoccupied with specific skills and specific niches, and provide no way of moving from niche to another, we are making a great mistake.

My final point is, what are the potentials? I was much impressed by the statements made this morning about how technology is changing and will continue to change. To help fill our conception of needs in the health field we have to find out, I suppose, some way of making this quantitative. How can we guess what the potential needs are? Who (and what) are the Allied Medical and Allied Health fields, given the technological potentials? It is going to be hard for us if everywhere we move we find the vested interests of the existing groups, of which we already have heard examples today, who want to make sure that the new needs don't develop in such a way that new practitioners come in and dilute the existing monopolies.

So maybe [it would help] if we took a comparative look, say, if we saw how these functions are managed in other societies and other countries today, where the vested interest of the health profession is not as strong. For example, if you go to Sweden, you'll find that the medical planning, health planning, is much more open. There are many more alternatives than face us here today. In judging how new health practitioners can enter into practice--and that's what we're doing now--maybe we can get a few more ideas about our own system by studying other systems in operation.

In conclusion, I regret that we don't have our own experts with us. As I remember the invitation, it said, "Bring your No. 1 man"--ours is in an emergency and can't come--"and another person--don't bring the expert". I don't understand that. Unless if it was a financial problem and we couldn't afford to bring the third person, I would gladly have opted for our Allied Health person's coming today instead of me.

Dr. Johnson: May I comment on this matter of who was invited today? The staff of the Allied Health Professions Projects and the League staff thought it important at this session to have the highest administrative participation, at a policy and decision-making level. It was therefore decided to invite the Board of Directors and the League representative for each member. As I understand it, if any joint meetings are held in the future, the next would involve the health project program leaders on the respective League campuses. This, I would hope, would happen as one of the outcomes of this session today.

Dr. Bill J. Priest, Chancellor, Dallas County Junior College District: I have about 30 copies of this document* and can provide one for anybody here who has not seen it. We don't have anything really earth-shaking to report, for two reasons. One is our position in the order of speakers, which makes some of what we do have to say repetitious, and also, when the lineups were being formed in Dallas we did not at that time commit ourselves to active participation in several of the teams that were being shaped up.

Our primary concern at the moment is in staff development and in locating and forming cadres that will go out and staff our new colleges. We will jump very rapidly from a single operational unit, which we are currently operating, to a total of four units in September, 1971. So we have the problem of finding about 400 people, staffing three new campuses from top to bottom.

Moving over into the area which brings us together today, on these sheets I have distributed we are presenting a staff report which endeavors to share with you anything we think may be of consequence to others in the Allied Health training field--nothing startling, but merely some of the things we are doing and, to an extent, possible comments on evaluation.

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*See Appendix E.

I'd like to mention a couple of other things. For some reason not quite clear to me, I am the only junior college representative on the Allied Health Manpower Reviewing Board. My experience has been not unlike Joe Cosand's in that I am, in quotes for this purpose, a "peer" with a group that is predominantly deans of university medical schools. Their impression of the junior college and its role and contribution capabilities is like nothing you've seen. Likewise, as nearly as I can tell (being a neophyte) there seems to be a grand old tradition that has developed where the med schools, particularly those private schools that do not have any public support and are dependent on the money-hustling talent of their deans, "re-cloak" in some kind of new salable package jobs that relate to recurring obligations--what we would call regular staff jobs--and without being critical, although I do think it defeats the purpose of the legislation, they sell to each other these old jobs in new wrappings so that they can keep the doors open. Being naive, I have raised a number of questions that have not exactly endeared me to the committee, because I have not fully understood what was being done in the way of innovation.

However, I would ask you--and there are some 32 junior colleges represented here--to help me to help you and do my job. I urge that you assign an expert wherever possible on the proposals you submit [for funding]. Some tremendously shoddy stuff is coming in, and a proportionate part of it is coming from the junior colleges. You're in a competitive situation that is very rough. This is the area where the prime movers are not yet convinced that there is a major contribution to be made [by the junior college] and if you don't anticipate and spell out very clearly what you can do, how you can do it, how it relates to whatever you're trying to sell, you'll go down in flames in the first round.

To add insult to injury, there's the financing problem; where even if you appear to have something feasible, you compete with more prestigious firms, and then it really gets rough. So, hopefully, we can get an equitable share of this Federal money, but it is extremely difficult to get it unless we (1) submit real good proposals and measure them out against whatever criteria are being used; (2) if they are general, be sure to show how they are innovative--that this is the pitch that is being made. Otherwise, you're wasting time and paper and mailing costs, because a buck is real hard to come by through these reviewing boards.

I'd like to add a name to the list of leaders that has been suggested. We have in Dallas a dean, Charlie Sprague, of the University of Texas Medical School. Charlie comes into the situation from deanship at Louisiana State. His conception of "deaning" a university medical school is much broader than the traditional conventional view, and he sees a very broad spectrum of responsibility for the med school. This is certainly uncommon in this particular med school. He sees a community relationship; he feels a social conscience that's above and beyond training doctors. And he sees the tremendous dependence of the medical profession on the para-professionals or sub-professionals who will shore them up and who will make it possible to get more mileage out of these highly skilled and not too numerous people. He knows about the junior college and sees in it a great potential. And incidentally, he is prestigious among his peers in other medical schools. So I would contribute his name to this kitty without his pre-approval as one of the people who would be able and inclined to help us.

We are in a major medical center in Dallas. We offer a program that is skewed toward the allied medical fields. About one-third of our technical occupational preparation right now is in the Allied Health fields. Because of the nature of our community and its heavy emphasis on medicine and medically related matters, this ratio probably will continue.

We're going to "piggyback" on some of the things that you're doing, and I hope we'll be contributing. And when we get our main show on the road, our views then will be a little bit different. I hope we will no longer move from crisis to crisis, but will rather organize our chaos in a little more coherent fashion. Then perhaps we'll be able to make a contribution of greater magnitude than at present, where we are parasitic and admit it, and are trying to do something about it as soon as possible.

Burns L. Finlinson, President, Bakersfield College: As Bill Priest indicated, certainly particular projects have been developing for a long time in the junior colleges. Our LVN program started back in 1951; then in 1955 we initiated a series that we think of as a medical lecture series. This is what we have in mind in developing Techs. This is a program that constitutes about 10 lectures each semester, in which we try to tie in with the medical profession in the communities, who serve as the lecturers. The subject matter will, of course, vary from year to year and with the interests that are common at that time. This we've found to be good as far as the medical people are concerned, and it has proven to be excellent in terms of the citizenry involved.

Our RN program has been going for something over 10 years. This year we started our first class in Dental Assisting. We already have a Medical Terminology program. We now are building a new unit with which we hope to get into a Food Service program. And we're very much interested in the Allied Health Projects at UCLA, because we're thinking in terms of Dental Hygiene, Medical Assistant, Radiology. We're anxious to keep in touch with you people about this matter, so that a year hence we'll come back with another program we hope to have under advisement. We are making a real effort to work with the local hospitals in terms of helping to cut down some of the expense problems involved in these units. We, too, have thought in terms of cost-benefit analysis.

I might mention our new Audiomedia Center. We are starting to work now in this area, and have under way projects that have to do with video-taping; some particular aspects are in the Nursing program.

Mr. Coultas: Much of what I have to say has already been said today. We have the LVN program, or, rather, we do have one operation there. We have such a large district, reaching from Tahoe to Davis, that we have established a branch location of an LVN program. We have done another thing that I think is unusual in a multi-campus operation, and that is, to establish an RN program under one college at the other college. We felt that we wanted to get away from the expense of having dual directors, and since we had this established Nursing program at Sacramento City College and needed to go into a crash program for RN's, we got away from the idea that you had to have a director on the job for a year of planning before you could open a second program. We just established two sections of Sacramento City College at American River College, under the same direction. It's been two years now and we'll have our first graduating class from Sacramento City College at American River College in February.

One new college will open in 1970 and we are building three additional colleges, one to open in '72, one in '73, and the third in '75. We have made a vocational plan of the whole district to see which colleges would offer certain programs. The college opening in 1970 will be the one to handle the total Paramedics program. We have Dental Hygiene; we are opening Dental Hygiene at Sacramento City College this coming September. We have a Dental Assistant program there at present. As a result of cooperative action we will be working on the Paramedics program with the new Methodist Hospital and also with the new U.C. Davis branch that is to open in the center of Sacramento.

We have a branch location in Hangtown, and here we are offering refresher courses for the nurses living in El Dorado County, in a crash program to prepare nurses to return to work 10, 12, 15 years after they have been out of the business. This refresher program is a 160-hour course, and up to now we have had two graduation classes from that group.

We see great hopes for the new campuses and particularly for the new college opening in 1970, because we are building a cafeteria that is a teacher's station rather than merely a food service facility--food service is secondary; this will enable us to go into the Dietitian program that we talked about earlier. We know now that we will have just the one RN program. We have some 250 RN students at Sacramento City College and the branch at American River.

Joseph Fordyce, President, Santa Fe Junior College, Gainesville, Florida: It becomes increasingly difficult after an exciting day like this, hearing these wonderful reports from the Projects and these distinguished colleagues of ours in the League, to be innovative about innovation. We have come to the conclusion that when we get brilliant ideas, and are quite sure we thought them up all ourselves, and then find out that others already have been doing the same things for years, that innovation ultimately is a distillation of the ancient wisdoms.

I have four points to make--four things that we think are important in terms of our participation in the Allied Health fields. (1) A concept of regional development is no great shakes for the chancellors and superintendents who already have a regional organization. Santa Fe and Delta and some of the other poor college districts can only afford one campus. When we seek cooperation, this means getting in other college presidents who do not have to be in. As a consequence, this is a different battleground entirely.

In Florida there was considerable enthusiasm for the development of Nursing programs when Kellogg had been selling lots of corn flakes; and I believe that in anybody's sound judgment there were perhaps too many of them established at that time, many of them fairly poorly supported from the standpoint of clinical facilities and other kinds of background materials. We are hoping that at Santa Fe, because we are at Florida's center for medical education, as is Dallas for Texas, we will be able to provide a centrality of programs here, so I think that the regional concept of development may introduce some novel if not unique considerations.

(2) We have been very much interested, as many of you have said you are, in the development of a health core--a core of studies that we call in Santa Fe the "common program". As we range from the common program required for all, to the degree of specialization that is required for entry employment in a particular field, be it occupational, educational, or whatever, we are trying to emphasize the growth of a core which lies somewhere between. We are trying to isolate, in other words, the commonalities of the health fields, as we would in any other major occupational program, and assume that the commonalities are of much more importance for two-year programs than are the differences. I think this is an area where League cooperation certainly would pay great dividends.

(3) We have a relationship with what we call our second campus, right up the street from us a few blocks, and frequently referred to as the University of Florida. There is a considerable development at the University of a Center for the Study of Medicine, one of the first such schools, with one of the first of the Colleges of Health-Related Professions. I am surprised to learn from Dr. Anderson today the number of these that have now developed. Dr. Darrel Mase has been dean of that college, and is something of a leader in the development of these institutions. He has indicated a tremendous amount of support and enthusiasm for the development of health-related programs at the community college level. We feel that this will provide a great number of opportunities for further development, as many of our colleagues have indicated.

(4) Finally, with some sub-points, is an area that interests us greatly; I think perhaps it is a little different from some of the other things that we have heard today. We have been very much interested in the peripheral benefits--the spin-offs--of the Allied Health programs. One of these, for example, has to do with the area of Vocational Rehabilitation. Starting this week, we have undertaken an enterprise in cooperation with the local Office of Vocational Rehabilitation, in which we will take into the college individuals who are eligible for OVR benefits, and over a period of six months or six weeks or perhaps a much longer time will provide them with a combination of educational experiences as well as a greatly more detailed analysis of their condition and potential. So, a marriage here, of some of the interests of the medical fields and the allied medical fields with the psychological, ranging all the way from that to the more purely educational counseling kinds of relationship.

These are the kinds of things that have interested us very much because we have noticed, as many of you implied during the day, the very close relationship between the various specialties that can be developed in the Allied Health fields with the other kinds of programs, and business, and engineering, and almost all the rest which do, in my opinion, have a very definite place in the community junior college.

The second sub-point is such programs as Air Pollution Technology. In inaugurating a program of Air Pollution Technology, we naturally have our California friends dearly in mind.

Third sub-point: the Behavioral Sciences program has a number of what we hope will be very interesting benefits. One of the reasons we became interested in this was the great number of students who enter junior college with the avowed purpose of transferring to four-year colleges. You all know the statistics, and presumably they have not changed very much--two-thirds of these young people say they're going to transfer; in fact only half of that number, or one-third, actually do transfer. We are greatly concerned about that half of the two-thirds who do not go on to college for one reason or another. I do not for a moment consider those to be failures--in fact, we have outlawed failures by fiat--by regulation--because we feel that this typical program of arts and sciences is exactly what people should have, you see, with those two years of college education.

Nevertheless, we were concerned with seeing if we could identify some occupational outlets for these people, so that people who are taking what is basically an arts and sciences program can, with only slight modification, be enabled to enter into some very interesting occupational outlets, if we help them to identify them.

I was very much interested, for example, in the discussion of the Office Assistant. We think this is a very definite and clear-cut outlet for those persons who would have basic training in psychology and sociology as the basic part of their education, enabling them to go into this Assistant level, or almost any kind of profession, including those in the health fields. More specifically, we have identified as the immediate employment opportunity for this behavioral science program the Teacher Aide, Early Childhood Educator, Counselor Aide; and here once again we feed right back into the Allied Health field because this is an area very closely related to the Mental Hygiene Assistant, whatever it may be called. One of the interesting things going on in the South right now, with funding from the Southern Regional Education Board, is the preparation of Mental Hygiene Assistants of one sort or another.

And finally, the ultimate spin-off--and according to what I've heard today we should not think of this so much as a spin-off, as the actual mainstream of the Allied Health fields--the whole business of Institutional Management, in which we are fortunate to have a leader who we think can help us along this road.

Dr. Johnson: It seems to me today that the term "common core" has been coming out repeatedly. Apparently this is an emphasis that is receiving a good deal of consideration in the Allied Health Professions Projects. Now, the question I have is: does this have direct relevance to the proposal that you, Walter [Hunter], are going to present tomorrow, on a systems approach to general education for career students? In other words, is what we have been talking about today directly relevant to your proposal, which may suggest possible cooperative work between the League and the Projects staff?

Mr. Hunter: This did indeed occur to me as I heard the references to the "common" program. I guess what we're really saying is that this includes both the general education increment and the support courses, such as mathematics, chemistry, and other fields that might support the particular skill area which the student enters. So I suspect that common program represents about half of what we are talking about.

Dr. Cosand: I'd like to elaborate just one other point. This common core we are discussing in the Allied Health services is something we also are considering in other areas as well--such as the common core of your business and related technical courses, and engineering technical courses. And the more you can work toward this, the less proliferation you're going to have, especially with specific courses. I think we have to do this on a cost basis.

Chairman: The last school we are to hear from, Seattle Community College, has sent us two distinguished representatives--its president and its Chairman of the Board. Would you like to start off, Ed?

Dr. Ed L. Erickson, President, Seattle Community College: We're a little like Dallas in that we're trying to copy all the workable ideas we can find. We're new, going into our third year, but unfortunately we're very large for this stage, with about 8,500 full-time equivalent students; I don't know how many we have in all the health-related programs.

We've opened bids on our first campus, about half a million square feet, as first phase of our North Seattle campus, and it has extensive space for the health-related programs. We've spent a lot of time with various advisory committees and the University of Washington School of Medicine trying to build flexibility and adaptability into the facilities.

We've had the LPN program for some time, and I think there are about 150 students enrolled in it. At present we are renting a former nurse training center immediately adjacent to Cabrini Hospital. We have a large Dental Assisting program which is very popular. That, and a new Dental Technology program, have just moved into remodeled facilities. We also have a Medical Secretary program.

We've been asked by the University of Washington School of Medicine to assume responsibility next Fall for the Intensive Care type of educational program, which would be offered at the Science Center, where we already have the facilities. Our Inhalation Therapy program also will begin next Fall. We're hoping by Fall of 1970 to go into the two-year Associate degree in Nursing. I want to talk to some of you individually to get as much background as I can on this. We also are looking for someone to head our total health-related program, so I'll be doing some recruiting.

One project of ours which I might consider innovative is a program we are planning for next summer, as a result of an experience we had in summer of 1968. Many of us are concerned about the kind of counseling young people receive at the high school level and the lack of understanding there about the various fields into which they can go. High school teachers and counselors seem to have a very skimpy background on what the opportunities are. Last year we applied for and got a $20,000 grant in Vocational Guidance, and invited 30 high school counselors and teachers to our campus for a six-week course. We specified as eligible a counselor, particularly a senior counselor, and a teacher of one of the required subjects, including social sciences and English. They spent six weeks on our campus undergoing orientation in the Hospitality Trades. They actually went through the programs, finding out what it took to be a waiter, waitress, or hostess, and doing some of the cooking in the various kitchens we have in a very large Hospitality Trades program. We enroll some 400 students in this program, including the Chef program; some of our instructors are members of what would be comparable to the College of Surgeons in their own professions.

So we go through the whole gamut, and each of these counselors and teachers had to go through the baking program, meat cutting, preparation of fancy foods, and the rest. We already have reaped results from this in that there is a higher percentage of high school seniors inquiring about the Hospitality program than any other part of our whole operation.

So we've applied again for a grant, this time for the Allied Health areas, to take high school teachers and counselors through the various Allied Health programs to give them a better understanding of what potential students need for success in these programs. Often we don't get enough of the students we think should be going into these programs, and then we have to do a great deal of guidance into or out of these programs because of misguidance. We think this is a point of innovation that might be of interest. In fact, we intend to go ahead with the plan even if we don't get a grant. Incidentally, the public school system grants advancement on the salary schedule to the teachers as a result of this experience.

We work very closely with the University and with advisory committees. Mr. Siegel, our Board Chairman, has been active in hospital administration as a Board member or Chairman for about 15 years, and I have served as a Hospital Commissioner for 10 years. Both of us have a deep interest in the health-related field, and you can rest assured that policies will get special attention in this field.

Arthur Siegel, Chairman of the Board of Trustees, Seattle Community College: Sometimes I wonder what Board meeting I'm attending, but that's beside the point. In the health program that I represent, last year we got an MDTA grant to develop Doctors' Assistants to relieve the nurse of a good number of routine tasks which demand a great deal of her time. The shortage of nurses and the rise in pay scales results in efforts to save the time of nurses. This is our first step in that direction.

Mr. Carlyon: I think one of the problems we faced this year concerned growth. We had 75 freshman students in our Nursing program last year and were hoping to double the number this Fall, instead, we went to 229 freshmen, with faculty for 150. Within the next two or three years we will be adding several programs that were discussed today. We are doing it gradually; in a smaller school, we have to be careful that we don't delude ourselves into trying to be all things to all people, too quickly.

However, we have a unique advantage in that while we tend to "poor-mouth" at Delta, we are no longer in a position to do that. Within the last few weeks we had a millage vote that gives us flexibility to levy in terms of the operating millage, up to three times the amount we have until now. [Applause.] And in our debt retirement or our construction plans, we would be able, if we deemed it necessary, to issue up to $16 million in bonds and levy the tax necessary to pay for that. We don't expect to get up to these figures for several years; in fact, we expect this to take care of us for some time.

One of the projects we have planned for some time,and expect to achieve within the next three years, is a Health Professions building. This will be a separate building, and a rather sizeable project for us. However, if you want to experience the contrast with all this flexibility in financing, just sit down with your faculty and determine what salaries should be for the next year when they know you have practically unlimited funds available.

I'd like to comment on some of the things I've heard today. One, though on a lesser scale than Bill Priest's or Joe Cosand's experience, is on the State level and concerns our own Allied Health Professions Advisory Committee. We've had one meeting of this committee and I think it is indicative of the way some of these matters are looked at that I am included as a "non-professional" member, while the "professionals" are physicians. As they talked about the problems of health services in the State of Michigan they talked about the end result, that is, the service itself, along lines analogous to saying about an automobile that "since the workmanship is not good when the auto reaches the consumer, we will change the design" rather than considering how design and training and workmanship all fit together--that is, go back to the service itself, rather than change the design. I'm not sure I can have any effect on this attitude, but this is the way they looked at it.

I've wondered, too, about the matter of air and water pollution. Michigan passed a bond issue for a third of a billion dollars for pollution control, to be spent in the State of Michigan within the next three to five years. This will, in effect, make about one and a half million of this money available through local resources and Federal funding. As we look at environmental problems, I wonder if one of the problems has not been that people who are working in water pollution have been basically trained in the sciences rather than in health. For us, this opens a big field we hadn't considered before in relation to the health-related field--I mean, coming back to the thing Kay was talking about this morning.

In relation to funding, Joe (Cosand) talked about the reaction of other educators in the country to the tremendous power being developed by the junior colleges. I wonder whether we haven't gotten to the point where we should concentrate on putting our names on the individual programs, rather than just pushing in terms of the college itself. We tend to concentrate on the image of the college, rather than the image of the individual program and how it serves the segment of society which it is designed to serve. Maybe we wouldn't bear down quite so hard if we concentrated on the service that these programs provide.

Chairman: Now we come to the discussion of plans for cooperative work between and among colleges and the Allied Health Professions Projects. This part of the agenda definitely is not structured. I think that the idea of Dr. Anderson and Dr. Johnson is that this is the time to offer any suggestions you might have concerning possibilities of working together and and working with the Allied Health Projects. There was a lot of talk at lunch and I think now we already are on our way, so it's a matter of getting back to it.

Dr. Cosand: May I digress for a moment? There's something on my mind and I don't know whether there is anything we should do about it. As I look around this table at the college representatives here, I know that almost all of us have developed programs over a period of time in facilities that were anything but the best, and out of it has come some very strong institutions. Now, I just want to mention this and drop out. There is an article in the last issue of the Junior College Journal that condemns everything we stand for and points out that if we operate as we do, we are going to have second rate faculties, second-rate institutions, and everything else second-rate. I wrote a letter to the author of the article objecting rather strenuously to this. Incidentally, in the back pages of the Journal it is stated that the author speaks knowingly of his subject. I wrote that I thought he was doing a disservice to community college education, and I believe every junior college district represented here has moved just exactly in the opposite direction from what he has advocated. His advocacy is that you don't bring in a program until you build a staff and spend three years building a college, and then you open the doors and you have a live, aggressive, intelligent, hard-working faculty; but if you do what we do, you have a tired, second-rate faculty that's going to put on a second-rate program. I'll drop it with that. But it seems to me that as a League for Innovation we have been moving and have moved in the direction opposite from the one presented in this article. And I'm concerned that the article may cause a lot of Boards and communities that want to procrastinate to put off necessary action by following the advice given in that article.

Chairman: Joe, I've added this to the agenda for tomorrow morning. We'll drop it here with the idea that we might have some possible answers to this article, perhaps individually, perhaps collectively. I think you have an excellent point. Several people talked about getting started in the area of health services--we very rarely start off with the kind of wonderful building John Dunn has described; in fact, he hasn't started with it, either. Is there agreement that we may touch on this tomorrow? [Indications of assent.]

Dr. Wolf: We have two suggestions that may be of value to you. (1) Except for a few of the larger colleges, many of the schools are just beginning to develop new Allied Health programs. I think our college might be typical--we started with the Associate degree Nursing program, and then moved into the X-ray Tech. On our drawing board for the next few years are five or six of these programs to be instituted as we see our way clear. I think many colleges fit into this pattern.

So two things the League might do, as the League: (1) Colleges that have had experience in developing curriculum in these specialized fields should, I think, supply this infórmation to the League, and the League should have this information put together into some kind of pamphlet or book, covering two areas: The actual method of curriculum development, and the curriculum itself. This will make it possible for any League member who is considering Inhalation Therapy, which we are looking at for two to four years from now, to consult with people who have developed this curriculum and also to get some information about the curriculum itself. My second suggestion is to set up a small list of possible consultants on special curriculum who have had experience at their own colleges in doing this kind of work--for example, with X-ray Technology. Here is a field in which we have a man whom we could make available to other colleges on a short-term basis. He is a radiologist with 18 years of experience in teaching and radiology. He has developed our curriculum, and could save somebody else a great deal of time if he came in to consult for just one day. If the League could supply a list of these people, where they are located, what their experience is in these various curriculum areas, it would be very valuable. We wouldn't have to go back to the League--we would have the pamphlet I suggested, or whatever it is, and then we could ask this specialist to come up to our college for a day and spend some time with our people.

Dr. Johnson: I'd like to ask Marty [Wolf] to accept one amendment to his two suggestions and then ask Miles [Anderson] if he thinks this would be appropriate. I noticed you suggested that the League do this. Now, the purpose of our meeting today is to discuss cooperation between the League and the Allied Health Professions Projects; and it seems to me your suggestion might appropriately be addressed to the staff of the Projects, suggesting that they secure this from the League as the basis of plans for dissemination of plans for curriculum development and the actual curricula that are formulated, and also compile a list of highly qualified consultants. Would you be willing for us, Miles, to make this suggestion?

Dr. Anderson: Yes, I think it is appropriate and that it's inclusive in our mission that we are supposed to do this.

Dr. Johnson: And then members of the League would agree to respond to your request for this information, to make this possible.

Dr. Goldsmith: I think this is an entirely appropriate project, but I don't think it should be limited to the League. So if your needs are immediate, perhaps your request could come to the Project and the responsible staff member could help dig out the information for you. As we move along, we would be glad to provide the League staff with whatever we find out. It may well be that colleges outside the League also have excellent programs about which you may want to know, and I think if you are restricted to interaction among the League members, then it is League business.

Dr. Johnson: Don't you think, Marty, that this would be even better? There are not too many League schools in your area, and there are others that probably could be helpful.

Unidentified Speaker: Somebody is going to have to identify those schools that have the special curricula, and this is a difficult problem.

Dr. Goldsmith: The point is: if your need is immediate, call and we will see what we can dig out. If you can, wait a while, because it's going to take time for us to get this material together.

Dr. Johnson: I'd like to comment and get your reaction to this, too, Dr. Goldsmith. We have no monopoly on these within the League colleges. On the other hand, it seems to be that we are trying to set up a unique working relationship between the League and the Projects. I am wondering whether Marty's proposal could be used as an initial step in a pilot proposal, so that we could be getting materials from the Projects that would probably help the League, stimulate the membership, and also help the Projects. But this is something the Projects staff would have to consider, of course.

Dr. Anderson: I don't see that there is any exclusivity involved. We already are working with American Association of Junior Colleges and we have a National Advisory Committee to bring into the picture anybody who has any relation to the problems, and this is an organized group. Because we work with you doesn't mean that we exclude others. We will work with everybody in the country who will work with us. And since you are present here and now, I'll say yes, we will work with you and with the others, too.

I'd like to add that there sometimes is an impression that we are interested only in junior college programs, which is not true. In the grant document it is specified that we are to work on Allied Health Professions materials from the bottom clear on up to and including, but not beyond, the Associate of Arts degree. This would include on-the-job training of the simple type for use in hospitals, like our little clinical instructor training program, and everything else right on up. So you see it is rather inclusive.

Dr. Goldsmith: As I listened to Mr. Coultas discussing establishing relationships, it seems this has gone a bit more in health than in education and other fields. In the health fields we have been told in preparing grant applications and planning programs that we must take into account whatever else is going on in the community and establish relationships with all appropriate bodies and organizations. Apparently the Allied Health Professions offer an ideal place to begin to develop relationships with other institutions. I refer to the association with four-year college or the University in your area, as Mr. Coultas has with UC Davis or Dr.Fordyce with the University of Florida. This is great. The University, the four-year college, the high schools, the hospitals--instead of looking at the junior college clinical setting picture alone, it may well be that you want to examine what else is going on, and get together with others. This, in education and health, would be highly innovative, and we should start it.

H. Deon Holt, Director of Development, Dallas County Junior College District: Dr. Goldsmith, a question. You said earlier that there are variations between state licensing and other requirements for the Nursing and Laboratory Technician types of fields, where perhaps you can't develop a truly national curriculum. Are these the only areas where you have this problem, or does it appear frequently.

Dr. Goldsmith: I think we'll find it cutting across the board, and we hope to deal with it. Our grant officer spoke quite a bit about developing modules and structural modules, so that we can deal with this problem of differences in licensure and in job descriptions that occur in various regions of the country by correlating modules that will teach the total job. You know--"this thing needs to be done, and this is how you do it". In one state, a module may go into the curriculum for one occupation, and in another, it may go into another. This is one of the problems facing the Allied Health Projects--the discrepancies between utilization and custom and licensure. But care of the patient, care of the health of the people, essentially is made up of just so many functions. So if we work on a modular functional basis, I think we will be able to handle it.

Unidentified Speaker: I'd like very much to ask Dr. Anderson's reaction to what he has heard today.

Chairman: This is part of what we hope to get. Before we close this afternoon, I would hope that Dr. Anderson and Dr. Johnson each would provide some sort of summary. Right now, it is just a matter of getting ideas and possible plans for cooperative work among the colleges and between the colleges and the Allied Health Projects.

Dr. Johnson: I'm afraid some of us don't know the limitations of the Projects within which the staff may perform. Some of the things we may wish to see done may be outside the limits placed on the funds that are available. Can we discuss Projects-League cooperation now or should this wait until tomorrow morning?

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Chairman: This is the time. What are the limits, Dr. Anderson?

Dr. Anderson: What do you mean by limits, exactly?

Unidentified Speaker: Well, for example, one problem area in at least some states is the extent of the training program, say, in Nursing, as between the two-year and the four and five-year programs. What can be done in some of the states where Dental Hygiene training on a two-year basis is not allowed; or here in California, where the Lab Assistant has to complete a five-year training program, and where there certainly seems to be a feeling on the part of some professionals that it can be done in less time.

Are these problems in the area where there will be a cooperative study to determine whether the two-year program can or cannot be effective? If we were to set up a proper program under the leadership of UCLA (I was thinking specifically of the Lab Assistant) I believe we could get enabling action from the Legislature which would allow certification of these people on a temporary basis to prove whether it is feasible--as we did in Nursing at one time.

Dr. Anderson: I think Dr. Goldsmith already has started to probe that in the Lab Tech field and this, I think, is an area that would have to be studied on a comparative basis, because in some states they do it one way and in others, another. For example, the Dental Hygienists--the one I went to a couple of weeks ago is pretty upset and angry because she went to school for four years to get her certificate, and now these kids are qualifying for certification on the basis of two years, and she doesn't like it. She admitted, however, the two-year graduates can do the job. The success of the program inevitably is going to solve that problem--you are in the midst of solving it right now. There is nothing to stop us from developing instructional materials for the Dental Hygienist with which the program can be stretched out to four years or cut down to two.

Dr. Flint: Let's get back to the Lab Tech. I get more complaints on this field than any other. Something has been a roadblock up to now to prevent discussion, as far as I can find, at the professional level, to determine what can be done to bring us to a two-year training program, or at least less than a five-year program. I still believe there has to be the prestige of UCLA or some such institution, willing to say to the Legislature--and it will have to be done professionally through the Legislature--that we are willing to work with some junior colleges to set up some experimental pilot programs, if we can get temporary certification, to find out how the Laboratory Technician can be trained in shorter time. That's exactly what we did in Nursing, but we had to have cooperation in order to get it done.

Dr. Anderson: It certainly would be innovative, and there's certainly nothing wrong with proposing such a program and trying to do it. Whether you'd succeed remains to be seen.

Dr. Flint: My question was, is there anything your group can do? Is that outside your limit?

Dr. Anderson: I don't see anything that limits us in this respect.

Dr. Goldsmith: Our job essentially is to define the field, as it exists and as it will exist, and develop appropriate curricula and instructional materials. When it comes to the actual programs for which curricula will be attempted, we will try to provide the grantsmanship know-how, the legislative know-how, the working through the professional organizations that are needed.

You are speaking of a particularly sensitive field because the roadblock happens to be the five-year Techs--they're frightened. In this field, I think we're going to act as catalysts. At this point there is a group operating in Washington, consisting of five-year Techs and pathologists, concerned with the same thing. It may take us three or four years to get California as a state to accept this. About all we can do, really, within the limits of our grant, is to provide the know-how. We can't help you fund a program except by helping you write grant applications to the appropriate agencies. We can help you with legislation when the time is ripe, and my feeling is that the time will be in about two years, until we get this State into line on that field.

Dr. Flint: What about some kind of cooperative effort with half-a-dozen junior colleges or more, on the development of core program that might be used in a number of fields?

Dr. Anderson: One reason why we are glad to see all of you here is because, hopefully, with this group and then with others also who have programs that perhaps aren't represented here, we can do that very thing. That is, have our Advisory Committee on a technical level for a given program develop a program, and then have your cooperation in trying it out to see if it's any good. In other words, "trying it on the dog," as we used to say, and you furnish the dog. And if the dog lives, then we'll pass it along. We can't do it any other way. We have to have the cooperation of not just the junior colleges, but the hospitals and all the other units that are involved in health care. But the junior college is a very important segment, no question about that. Just to wind up that thought, because that's one of the major points we want to make, I believe this is a valuable association for us. Number one, because it's organized --I mean you're on a regularly-scheduled basis of meeting at pre-determined times and places, with the leaders and with an office through which you can correspond, so this is always a useful tool. It's like an advisory committee that has official status and that's one reason why I was very happy to work with Dr. Johnson to have this meeting so that all of us could get together and get acquainted. In the future, I hope, you people would cooperate with us by doing exactly what you suggested. When one of these programs matures and develops to the point where parts of it are ready to try out, you would try it out and give us an opportunity to see how it goes. Then it works to your benefit too, because you might get some good things from the new programs you could keep and find they were very helpful and gave you some added voltage as well. So, I think we could both gain from it.

Dr. Flint: A third area I think of is the possibility of some kind of study to demonstrate whether some of the programs in our Allied Health fields right now can be conducted just as effectively at less cost--I mean with less manpower training responsibilities. For example, in California, I think we're supposed to have a ratio of one to seven in Nursing.

Dr. Goldsmith: I think it's one to ten, but only on the floor, though.

Several speaking at once: In the clinical area......As a matter of fact, we're limited even in our actual classroom to a very small number. ....It affects only the clinical area, but not the classroom....... There is no law, is there?

Dr. Goldsmith: It's an accreditation standard for the supervision of clinical experience.

Unidentified speaker: Hasn't television been tried in the supervision of clinical, to enable them to handle more students?

Dr. Johnson: Yes, it's being done at Bronx Community College in New York, and at Monroe County Community College. They are increasing the number of students supervised to as high as 20-- one supervisor to 20.

Dr. Watson: I think there is considerable interest in many colleges in actual involvement by our community college staffs in the experimental development of some of these instructional materials. Is this possible? Can you assist us in implementing this kind of venture?

Dr. Anderson: This would be the second point--to look to you people and your staffs, and not excluding anyone because in some of the areas where we will be working you may not have a program, and we'll have to look elsewhere. For example, this excellent X-ray technologist on the Delta staff sounds as if he'd be a very useful person to have as a resource person on a committee, to advise on the development of material, and then even take on some of the chores of developing it. We're in a position to pay for this kind of work--we don't expect to get it for nothing. The members of our staff who are Associate Directors are looking for this kind of person, and we certainly will look to help from you, indications as to your people with the time and interest and inclination to get into this kind of thing. That definitely would be part of the cooperative effort that we can carry on.

Dr. Cosand: I'd like to ask Mary Jensen a question about what she plans to do. We've heard a variety of suggestions--Mildred Montag in particular has pushed this idea--about community colleges' offering a six-month program for Nurses' Aide, a two-year program for RN or Nursing Technicians or something, and then you would have your four-year program. And then the three-year program and the one-year LVN would be phased out. She criticized in particular that many LVN programs are now post-graduate, with another three or four or five or six months, which would turn this into an 18-month program.

One question I raise in particular, Mary, is whether you will move into any of this in the research you do. Secondly, the College Entrance

Examination Board has developed what we call college-level entry placement tests, called CLEP. And the idea of CLEP is to test a person in order to screen him into a program, and permit him to phase in without unnecessary duplication of training.

I'm on the advisory board to this group, and when I brought up the need of something for Nursing along the lines of CLEP, they said, "Well, that's too hot a potato--we don't want to touch that." But my question is, must this be too hot a potato? Isn't there something in this area--and I'm serious about this--that can be researched by this group, where you have the prestige of the group, of the study, to back you up, to help us get some of these worms out?

Miss Jensen: I think there probably is. And I think there is some work going on right now in New York State, for instance, designed to create an examination which can be taken by not only the people wanting to move from an Associate degree program to a Baccalaureate program, but also in the area of the LVN.

Dr. Cosand: You also have the diploma program, the hospital program. Are you going to move into these areas in your experimentation?

Miss Jensen: I think it's highly possible that we might. I certainly am interested in it and I think it could grow out of this sort of thing. As far as the LVN and the diploma school--I think we are seeing a real decrease in the diploma schools, partly because they are attaching them more and more to community colleges or to baccalaureate institutions.

As far as the LVN is concerned, it is a very difficult question, because we keep on seeing a need for workers, and I don't know who's got any in-service material; or do we continue to develop these people for a short-term need in the hope that by improved methods of instruction we can perhaps turn out greater RN's.

Unidentified Speaker: John, doesn't this bear a little on what you were saying earlier?

Dr. Dunn: Yes, very much; and it affects us in our ability to help the so-called disadvantaged--and I have to say "so-called" disadvantaged--students. They go into LVN training, and it isn't a dead-end street. We have case after case of these people who have been employed successfully and are working in hospitals, and then want to become RN's, and find that they have to start all over.

Miss Jensen: I think we have to find some way to help these people moving up the ladder and there are programs throughout the country. Los Angeles Trade Tech is going to be working on a program; and we have to do something to facilitate this, maybe it is within the realm of the project.

Unidentified Speaker: That's really what I'm pushing for, Miles. I think this is a tremendously important point.

Unidentified Speaker: We feel that there is more opportunity to develop core curricula in this kind of thing, and that we might come to be viewed as "respectable" if we could consolidate all of our paramedical programs into one setting where we can equate commonalities.

Dr. Goldsmith: Actually, that's one of our jobs, according to the Office of Education. It will take us a little while. It may not meet your needs because it's going to take time. As we do task analyses of all these multiple tasks and multiple people in the fields we are covering, we are supposed to look for common core items. We probably will have simultaneous job analyses going on for several fields, so that at the end of the four years we may come up with a number of tasks and topics common to all the various fields. But this isn't something we can give you today or even by the end of this year. It will be a cumulative sort of thing.

Unidentified Speaker: Doesn't this all fit into the idea that we are attempting not to damage quality, but to get a little flexibility and a little reasonableness into the whole thing? At lunch, for example, it was mentioned that we are getting into our Tech programs some individuals who already had as much as four years of college. Why do they have to lock-step through two full years, when they already have had their Biological Sciences and Physical Sciences and all the general education?

Chairman: Lamar reminds me that time begins to run out. We have discussed principles and possible projects, rather than going into the specifics of the individual fields. Now, I believe Lamar feels a summation coming on.

Dr. Johnson: As we have discussed how we can cooperate operationally, it seems to me that the last 20 minutes have revealed some topics or problems on which we can work together.

I think we're indebted to Meyer Weinberg for pointing out that this is an administrative group--other than the Projects staff, this is not a health group; and we have not assembled here for an in-depth discussion of health problems and projects.

It seems to me, however, that we've had a tremendously fruitful day. I have been amazed by the variety of proposals that have been made, the varieties of progress that have been reported and the variety of opportunities for work together that have emerged.

I'd like to suggest that the staffs of the Allied Health Professions Projects and the League headquarters together analyze, summarize, and examine the minutes of the session that we've had today, for the purpose of identifying areas of likely cooperation. And I'd like to propose some of the areas that I believe will emerge from such an examination.

First, it seems clear that what we now need is a meeting of Allied Health Profession leaders and the members of the League, to get together with the Projects staff for cooperative planning on some specific projects such as have been suggested today. I'm not sure who should participate, but it seems feasible that the key person in health-related programs at each League member institution should be included. Perhaps an administrative representative--such as the Dean of Instruction--should be present. And it seems that such a meeting should be held at one of the League campuses where a good deal of innovative work is being done.

Second, I'd like to suggest that consideration be given to participation of the Projects and the League and Delta College in the kind of workshop conference that Marty Wolf presented this morning.

Third, we've talked a good deal about multi-media instruction, and I believe that Projects and League personnel might begin doing some thinking together on staff participation and work in multi-media instruction in the health professions field.

The fourth point has come up too seldom during the day's discussions. This is evaluation. It is very important that as we work together and consider projects in cooperation, we develop designs for evaluation.

Fifth, a number of persons have proposed what someone called a talent search. Names have been mentioned of persons who may or may not be appropriate as consultants and resources as we work together. I believe that there are other names that can be suggested. Meyer Weinberg tells me the man so highly commended by Oscar Shabat is Peter J. Farago of Presbyterian_ St. Luke's Hospital, in Chicago.

Sixth, reference was made several times to the fact that one of the obstacles to innovation in the Allied Health fields, as in other fields, is lack of staff time to develop the software. It seems to me that possibly Project funds might be used to employ highly qualified League personnel to work on the development of materials that will be mutually beneficial.

Seventh, reference has been made to funding and grant applications. This seems to be a place where the League, the Allied Health Professions staff, and Jim Trent of the R & D Center might work together as we identify projects and needs in this field, to work out proposals for funding to be made either to foundations or to Government sources.

Eighth--and this proposal applies particularly to members of the League--as we work on these developments in the Allied Health Professions field, whether it be on the single-concept film, audio-tutorial teaching, work experience education, clinical experience, computer-assisted instruction--we should keep in mind the possible implications of our experience in this field for teaching in other fields of the curriculum.

Ninth--the suggestion has been made the Projects staff assemble information from League colleges and others regarding the methods of curriculum development and the details of curriculum content and organization. This would be particularly helpful to the League and also to other colleges that are just initiating programs.

Tenth, the suggestion has been made that the Projects staff develop a list of highly qualified consultants in various fields so that if a college were considering starting a new program, a group of consultants would be available to help with this.

Eleventh--and I am getting to the end of the list--the League and the Projects staff might well work together on the development of core programs in the Allied Health Professions. This is relevant to at least one League project that is in the advanced stages of planning, and it undoubtedly is relevant to what the Projects staff is considering.

Twelfth and last, a great deal of concern has been expressed in the course of the day about the matter of costs. Costs may become a very serious obstacle to attainment of those high ideals that we have. There appears to be an opportunity for cooperative study of the costs of Allied Health Professions programs, including plans and procedures and possibilities for reducing costs while maintaining or even improving quality. I remember that when Chicago City College started investigating the use of television, careful cost analyses were made, and they found it was more costly than the usual type of teaching. But when enrollment reached a specified point--I think it was 700--the plateaus leveled and costs began coming down. This may not apply to the Allied Health Professions but it is an example of what one of our members has done in the area of cost analysis.

Chairman: Before we close the meeting, I wonder if members of the Allied Health Professions staff have any particular comments.

Dr. Goldsmith: If some of our staff members would like, for their own information, to visit your districts as a result of some of the things that have been said today, how would you like them to establish contact with the district for introductions?

Chairman: I think you should contact the superintendent or president, and then your inquiry would be routed. Any more comments before we ask Dr. Anderson for the benediction?

Dr. Anderson: That last remark was particularly amusing to me, since one of the major purposes in having this meeting was to get acquainted with the very people whom we shall be contacting. When Mary Jensen first asked me whom to contact when she went to Riverside or Orange Coast, I answered, "The president, of course." You never go wrong by starting with the president,"I told her,"so you get down there and get the results."

So we have brought the presidents here, and I hope you really mean it when you say our staff can get in touch with you and you in turn will put them in touch with whoever is best able to do what is needed.

After B. Lamar's wonderful summary, there really is nothing more for me to say, so I think we can close now. Thanks a lot, Mr. Chairman, for the wonderful job you did in conducting the meeting.

Chairman: I in turn would like to thank Dr. Anderson and Dr. Barlow and all the other people here for what I am sure you will all agree has been a very worthwhile day. We appreciate not only the opportunity to meet all of you, but also the hospitality extended, and the indications of some great opportunities to work together in the very near future.

Richard D. Howe, Coordinator, League for Innovation in the Community College: I think we ought to give a round of applause to the Allied staff for their supportiveness and for the arrangements made for our comfort and convenience. We are going to show our reciprocal support at a hospitality session in our offices in an hour or so. [Applause]

Adjournment

APPENDICES

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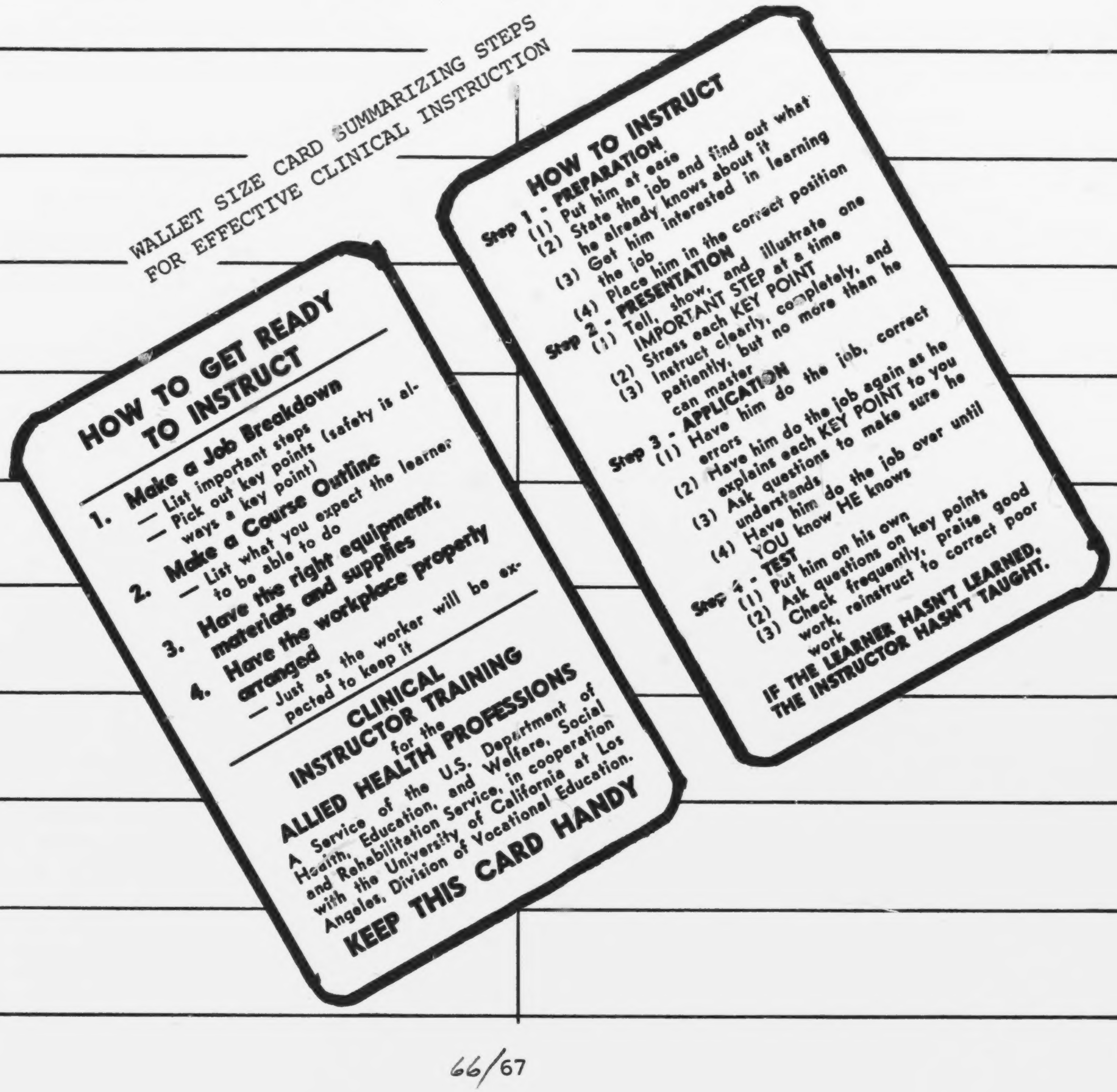
APPENDIX A

U.C.L.A. DIVISION OF VOCATIONAL EDUCATION
CLINICAL INSTRUCTOR TRAINING PROGRAM
JOB BREAK-DOWN SHEET

Instructor:____________________ Trainee:_______________________ Job:____________

IMPORTANT STEPS IN THE OPERATION: A logical segment of the operation when something happens to ADVANCE the work	KEY POINTS: Anything in a step that might Make or break the job Injure the worker Make the work easier, i.e., "knack," "trick," special timing, bit of special information



WALLET SIZE CARD SUMMARIZING STEPS FOR EFFECTIVE CLINICAL INSTRUCTION

HOW TO GET READY TO INSTRUCT

1. **Make a Job Breakdown**
   - — List important steps
   - — Pick out key points (safety is always a key point)
2. **Make a Course Outline**
   - — List what you expect the learner to be able to do
3. **Have the right equipment, materials and supplies**
4. **Have the workplace properly arranged**
   - — Just as the worker will be expected to keep it

CLINICAL INSTRUCTOR TRAINING
for the
ALLIED HEALTH PROFESSIONS

A Service of the U.S. Department of Health, Education, and Welfare, Social and Rehabilitation Service, in cooperation with the University of California at Los Angeles, Division of Vocational Education.

KEEP THIS CARD HANDY

HOW TO INSTRUCT

Step 1 - PREPARATION
(1) Put him at ease
(2) State the job and find out what he already knows about it
(3) Get him interested in learning the job
(4) Place him in the correct position

Step 2 - PRESENTATION
(1) Tell, show, and illustrate one IMPORTANT STEP at a time
(2) Stress each KEY POINT
(3) Instruct clearly, completely, and patiently, but no more than he can master

Step 3 - APPLICATION
(1) Have him do the job, correct errors
(2) Have him do the job again as he explains each KEY POINT to you
(3) Ask questions to make sure he understands
(4) Have him do the job over until YOU know HE knows

Step 4 - TEST
(1) Put him on his own
(2) Ask questions on key points
(3) Check frequently, praise good work, reinstruct to correct poor work

IF THE LEARNER HASN'T LEARNED, THE INSTRUCTOR HASN'T TAUGHT.

CENTER PANELS OF ONE-FOLD CLINICAL INSTRUCTOR PROGRAM INFORMATIONAL FLYER

CLINICAL INSTRUCTOR TRAINING

WHAT IS IT?

Clinical Instructor Training is a 10–12 hour course in techniques of on-the-job instruction for working members of the allied health professions who are responsible for any training activities in their departments.

WHO CAN BENEFIT FROM IT?

Anyone in the allied health professions who is required to train others in the clinical ("on-the-job") setting. This may include training for internes, aides, orderlies, attendants, assistants, other professionals, patients, and members of patients' families.

HOW DOES IT WORK?

In five two-hour sessions ten clinical instructors learn how to teach using the Four Steps of Instruction, how to get ready to instruct, how to put these skills into practice by giving brief teaching demonstrations, each followed by a critique and analysis. Putting these skills into action on-the-job shortens the learning process, increases efficiency, and cuts errors and waste.

WHERE IS IT GIVEN?

At *your* institution. The Clinical Instructor Trainer from UCLA will spend as much time with you as necessary to train as many Clinical Instructors as you need, and help you to get the Four Step Program launched and functioning smoothly.

HOW DO YOU PARTICIPATE IN THE PROGRAM?

This service is supported by the U.S. Department of Health, Education, and Welfare, Social and Rehabilitation Service, to help improve the rehabilitation of the handicapped. If your institution is engaged in rehabilitation work, either directly or indirectly, you are eligible to participate in the Clinical Instructor Training Program.

WHEN ARE THE C.I.T. SESSIONS OFFERED?

Any time during the year at your convenience, but on a first-come, first-served basis. The course is flexible, so the five two-hour sessions can be scheduled in five days, two hours daily; or three days with two four-hour sessions, and one of two hours. The first six hours cannot be given without a break to allow preparation of teaching demonstration plans. If more than ten are enrolled in one group, an extra two hours must be allowed. Minimum class size is eight, maximum is fourteen.

HOW MUCH DOES IT COST?

The Social and Rehabilitation Service has agreed to absorb the bulk of the cost of this new and experimental program through a direct grant to the University of California at Los Angeles, Division of Vocational Education. A nominal $15 registration fee is paid by each participant to cover some of the administrative costs of the program.

WHO WILL CONDUCT THE C.I.T. PROGRAM?

The program was developed by Dr. Miles H. Anderson, Director of Prosthetic-Orthotic Education at UCLA from 1952 to 1968. The sessions will be conducted by him personally. One of his major goals is to develop Clinical Instructor Trainers selected from each group who will in turn be coached by him to put on the ten-hour course for others in their areas.

APPENDIX B

REPORT TO THE LEAGUE

DELTA COLLEGE

November 19, 1968

"AUTO-TUTORIAL NURSING PROJECT"

I Availability of Film

After some minor legal problems encountered by Delta College with H.E.W. were resolved, Prentice-Hall Corporation has begun full production of the films. They will be available to interested League members about March 31st, 1969 on a loan with option-to-purchase basis.

II Proposal to League for Implementation

It is recommended that a one-day demonstration and workshop be held at the National Demonstration Laboratory located at Delta College on January 31st, 1969. The morning of this day would be spent by the participants utilizing the laboratory and familiarizing themselves with the materials and techniques.

The afternoon workshop would be devoted to planning by the participants to accomplish the following objectives:

A. Determine utilization of the films on their campus (Several possibilities are available)
(B) Determine evaluation procedures to test instructional effectiveness (Several research designs are possible)
(C) Determine a "feedback" reporting system to Delta College, the League and Prentice-Hall Corporation.

III Participants

It is recommended that each interested College would send at least two members:

1. The Academic Dean
2. The Director of A.A. Nursing program
3. Possibly other nursing faculty

IV Summary

Attached is a list of the 75 single-concept film loops. This proposal is tentative and open to modification by the League at this time.

Martin P. Wolf
Director of Research and Development
Delta College

NURSING SKILLS AND TECHNIQUES
DELTA COLLEGE SINGLE CONCEPT FILMS
SERIES A

1. APPLICATION OF HEAT: PERINEAL LIGHT
2. APPLICATION OF HEAT: CLEAN PERINEAL COMPRESSES
3. ASEPSIS: STERILE GOWNING
4. ASEPSIS: STERILE GLOVE APPLICATION
5. ASEPSIS: SIMPLE DRESSING
6. ASEPSIS: SIMPLE COMPRESSES
7. BANDAGING: ELASTIC "TOES TO HEEL"
8. BED MAKING: MITERED CORNER
9. BINDER APPLICATION: SCULTETUS
10. BREAST BINDER: COMPRESSING
11. BREAST BINDER: SUPPORTING
12. CHECKING THE FUNDUS
13. DELIVERY ROOM CARE OF THE MOTHER, STAGE IV
14. DELIVERY ROOM CARE: NEWBORN, PART I
15. DELIVERY ROOM CARE: NEWBORN, PART II
16. DRAPING: HORIZONTAL RECUMBANT
17. DRAPING: KNEE CHEST "GENUPECTORIAL"
18. DRAPING: LEFT LATERAL "SIM'S"
19. DRAPING: DORSAL RECUMBANT
20. ENEMA: READY TO USE
21. FETAL HEART TONES
22. FUNDAMENTALS: BACK CARE
23. GROSS PLACENTAL PHYSIOLOGY
24. GROWTH AND DEVELOPMENT: NEONATE, PART I
25. GROWTH AND DEVELOPMENT: NEONATE, PART II
26. GROWTH AND DEVELOPMENT: ONE MONTH, PART I
27. GROWTH AND DEVELOPMENT: ONE MONTH, PART II
28. GROWTH AND DEVELOPMENT: THREE MONTHS
29. GROWTH AND DEVELOPMENT: SIX MONTHS, PART I
30. GROWTH AND DEVELOPMENT: SIX MONTHS, PART II
31. GROWTH AND DEVELOPMENT: NINE MONTHS, PART I
32. GROWTH AND DEVELOPMENT: NINE MONTHS, PART II
33. GROWTH AND DEVELOPMENT: ONE YEAR
34. HANDWASHING: ROUTINE
35. HANDWASHING: SCRUB WITH BRUSH
36. HANDWASHING: SCRUB WITHOUT BRUSH
37. HOT WATER BOTTLE: FILLING
38. ICE COLLAR: FILLING & APPLICATION
39. INDUCTION OF LABOR AND FETAL MONITORING
40. INFANT TO MOTHER: CRIB TRANSPORT, PART I
41. INFANT TO MOTHER: CRIB TRANSPORT, PART II
42. INSERTION OF FOLEY CATHETER: MALE, PART I
43. INSERTION OF FOLEY CATHETER: MALE, PART II
44. IRRIGATION: CLEAN VAGINAL
45. IRRIGATION: LEVINE TUBE
46. IRRIGATION: THROAT
47. LABOR: ADMISSION SHAVE PREPARATIONS

NURSING SKILLS AND TECHNIQUES
DELTA COLLEGE SINGLE CONCEPT FILMS
SERIES A

48. MEDICATIONS: ORAL: SETTING UP
49. MEDICATIONS: RECTAL
50. NEDUCATUIBS: VAGINAL
51. NURSERY: BATHING NEWBORN I, PART I
52. NURSERY: BATHING NEWBORN I, PART II
53. NURSERY: BATHING NEWBORN I, PART III
54. NURSERY: BATHING NEWBORN II, PART I
55. NURSERY: BATHING NEWBORN II, PART II
56. NURSERY: BATHING NEWBORN II, PART III
57. NURSERY: DISCHARGE OF INFANT, PART I
58. NURSERY: DISCHARGE OF INFANT, PART II
59. NURSERY: INFANT TO MOTHER ARM CARRY, PART I
60. NURSERY: INFANT TO MOTHER ARM CARRY, PART II
61. OBSTETRICAL FORCEPS: CHARACTERISTICS
62. PEDIATRIC RESTRAINTS: ARM CUFF & CRIB NET
63. PEDIATRIC RESTRAINTS: MUMMY
64. PERINEAL CARE: PREPARATION, FEMALE
65. PERINEAL CARE: FEMALE CLEAN
66. PERINEAL CARE: MALE
67. PERINEAL PAD PLACEMENT: FEMALE
68. PERINEAL PREPARATION: DELIVERY ROOM
69. RECTAL TUBE: INSERTION
70. REMOVAL OF FOLEY CATHETER: MALE
71. RESTRAINTS: LEATHER
72. RESTRAINTS: POSEY BELT
73. RESTRAINTS: SOFT
74. SHAMPOO: BED
75. TIMING CONTRACTIONS

APPENDIX C

LANEY COLLEGE

Experimental Nursing Program

PROPOSAL

An experimental nursing program based on progressing from the simple to the complex. A broad foundation of fundamental nursing skills meeting the primary needs of everyday living with adequate opportunity for the practice of nursing theory core.

The program will provide continued opportunity to utilize initial skills and to gain new knowledge greater in depth and laboratory experiences which become an extension of earlier foundations, without the need to re-learn fundamental nursing.

RATIONALE

Nursing is not a pure science, but applied science and cross-science--a synthesis.

The objectives of work and the nursing process is determined by the practical skills and procedures which are the tools, techniques, and methods which are used to attain certain objectives.

There is a need to develop a foundation nursing program with realistic goals that belongs to the whole nursing education. A beginning for a lifelong process providing upward mobility for all interested in the practice of nursing.

Currently the Licensed Vocational Nursing programs in the state require twenty-five (25) units of nursing theory which included generalizations and concepts from the Human Sciences and twenty (20) units of nursing laboratory (skills), fifteen (15) units in excess of the minimum nursing unit requirements for the Board of Nurse Education Nurse Registration.

PROPOSED CURRICULUM

The curriculum will be built around formulations, one consisting of concepts and generalizations from the Human Sciences selected from Anatomy, Physiology, Microbiology, Physics, Nutrition, Pharmacology; the other a synthesis of concepts and generalizations from the socio-economic areas and the psychological basis for functioning in the practice of nursing.

The core courses are being developed through coordination with interested faculty members from the various disciplines who are identifying specific areas of content within the established college courses which are directly applicable to the nursing education core.

Specific Pilot Program Plans

A. Candidate Criteria

1. A total of sixty students will be admitted on the basis current selection measures for the LVN program. Following enrollment, the group will be equally divided into two sections.

B. Specific Core Subjects

1. Science Core
2. Socio-Economic and Psychologic Core
3, Nursing Practic Core

C. Specific Plans for Program Development

In Section I, the current curriculum will be taught by regular staff members in the standard three-semester program which meets BVNE requirements for licensure. Following the three semesters, one half the graduates will be requested to prepare for the Associate degree in the fourth semester of six units of History and six units of English required by the State Code and two elective units to complete the minimum sixty units for the Associate degree.

In Section II, the synthesized curriculum will be taught by regular staff members in cooperation with other college faculty members on a team-teaching approach. Two basic theory core areas: 1) synthesis of the socio-economic and psychological components in nursing theory, and 2) synthesis of the human sciences including microbiology, physics, pharmacology, growth and development, human structure and function will be given

equivalent to the Sciences and Humanities as required by the BNENR for a total of forty units of Science and General Education and Nursing theory.

The basic Nursing Practice Core (twenty units) will be taught by regular faculty. The methods and philosophy of the current LVN Program will be practiced thus preparing for licensure by the BVNE.

EVALUATION

In the interest of research, BNENR approval for accreditation is being requested from the Board of Nurse Education Nurse Registration. The licensure examination will be taken by all graduates from Section II.

1. Results of the success or failure in licensure exam by the BVNE will be compared with results from BNENR licensure exam.
2. A two year study in employment progress in the practice of vocational nursing will be made on all students graduating from the program.
3. A second study in employment progress as a technical nurse will be made on all graduates licensed whether initially in Section I or II.

SUMMARY

It appears timely and logical to provide community college-based nursing education programs which progress from the simple to the complex. Programs that will develop:

A. Continuity in nursing education by offering:

   1. Upward mobility from a basic foundation open to the educationally deprived who may choose to continue to function in nursing at a basic level or advance to a greater scope and depth of function.
   2. An opportunity for the academically talented to explore basic nursing without long-term commitment nor penalty of repeating fundamental nursing.

B. Continuity in nursing care through:

   1. Established positive relationships based upon common experiences in beginning nursing.
   2. Development of nurses ability to accept responsibility for learning.

APPENDIX D

LOS ANGELES CITY SCHOOL DISTRICTS

Administrative Offices: 450 North Grand Ave., Los Angeles, California 90012
MAdison 5-8921 Mailing Address: Box 3307, Terminal Annex, Los Angeles 90054

Jack P. Crowther, Superintendent of Schools
T. Stanley Warburton, Associate Superintendent, Division of College
John Lombardi, Assistant Superintendent

Allied Health Professions Developments and Plans

There are many health service curricula offered in the Los Angeles junior colleges. The offerings and applicable college(s) are listed:

Dental Assistant	City
Dental Laboratory Technician	City
Health Occupations Core	Trade-Technical
Inhalation Therapy	East
Medical Assistant	East
Medical Assistant-Typist	City
Medical Record Technician	East
Medical Secretary	City
Nuclear Medicine Technology	City
Nursing Home Assistant	Trade
Nursing (Licensed Vocational)	East, Harbor, Trade-Technical, Valley
Nursing (Registered)	City, East, Harbor, Southwest, Valley
Occupational Therapy Assistant	City
Operating Room Technician	Trade
Ophthalmic Assistant	City
Ophthalmic Optics	City
Prosthetics/Orthotics	Southwest

Complete information relative to any particular offering is available from the Dean of Instruction at the appropriate college.

Los Angeles City College
855 No. Vermont Avenue
Los Angeles, Calif. 90029
Telephone: 663-9141

East L. A. College
5357 East Brooklyn Avenue
Los Angeles, Calif. 90022
Telephone: 263-7261

Los Angeles Harbor College
1111 Figueroa Place
Wilmington, Calif. 90744
Telephone: 835-0161

L. A. Pierce College
6201 Winnetka Avenue
Woodland Hills, Calif. 91364
Telephone: 347-0551

L.A. Southwest College
11514 So. Western Avenue
Los Angeles, Calif. 90047
Telephone: 757-9251

L. A. Trade-Technical College
400 W. Washington Boulevard
Los Angeles, Calif. 90015
Telephone: 746-0800

Los Angeles Valley College
5800 Fulton Avenue
Van Nuys, Calif. 91401
Telephone: 781-1200 or
873-4010

West Los Angeles College
4800 Freshman Drive
Culver City, Calif. 90230

Additional information about certain curricula is included in another report being distributed to members of the (League) Board of Directors entitled "Summary of Innovative Developments in the Los Angeles City Junior College District."

The active federal interest in this area is reflected in the subsidized programs at several Los Angeles colleges.

City College has a continuing grant in the area of Dental Technology and Radiological Technology. This has provided for about $100,000 worth of supplies and equipment including an X-omat, phantoms, and TV equipment. In addition, City has received a $9,000 student loan for students in nursing training.

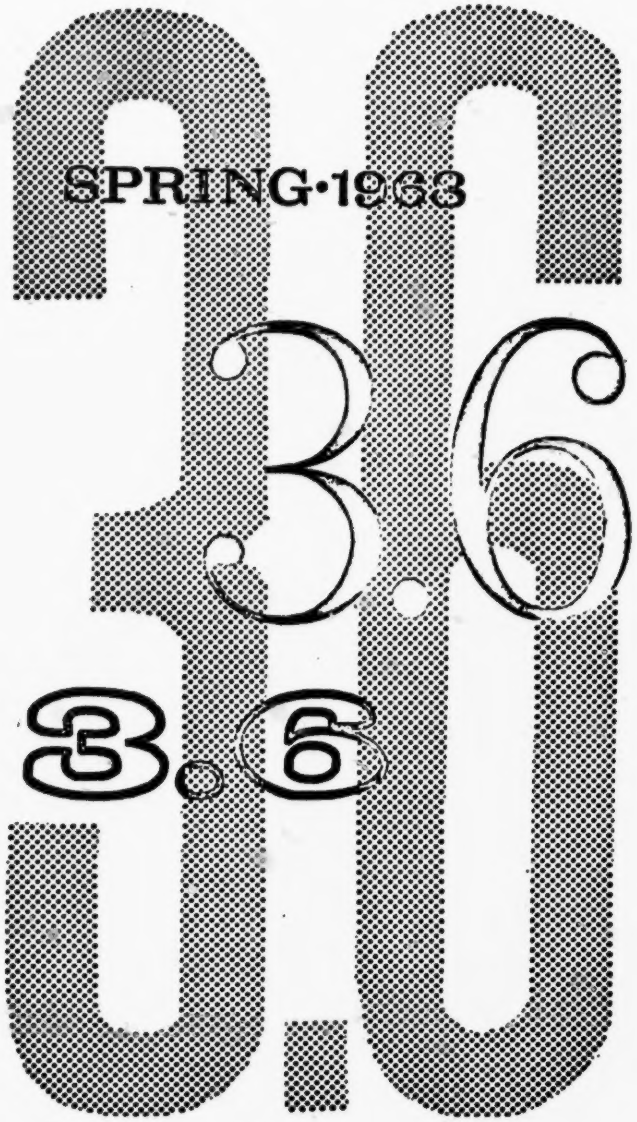
East Los Angeles College has a project in the field of Inhalation Therapy for about $3,000.

Trade-Technical College is currently submitting a proposal involving approximately $12,000 to conduct an experimental project for the upgrading of Licensed Vocational Nurse to Registered Nurse.

City College will also submit a request for funding of Occupational Therapist.

T. Stanley Warburton

League for Innovation in
the Community College
November 20, 1968



DEANS' HONOR LIST

DEANS' HONOR TEA

Tuesday, November 19, 1968
Student Center
2 p.m.

PROGRAM

PRESIDING

Mr. Paul Massaad
President, Associated Students

MUSIC

Los Angeles City College Chamber Chorale
David L. Glismann, Director

INTRODUCTION OF HONOREES

Mr. Louis F. Hilleary
Dean of Instruction

PRESENTATION OF CERTIFICATES

Dr. Glenn G. Gooder
President

ACKNOWLEDGMENT FOR HONOREES

Mrs. L'Bertrice Maddox

"PSYCHEDELIC WAY OF LIFE"

Mrs. Joan King
Vice-Chairman, Board of Governors
of California Community Colleges

Deans' Honor List

Los Angeles City College
Spring, 1968

The Deans' Honor List was established at Los Angeles City College in the fall of 1959. To qualify for this honor, a student must achieve a grade point average of 3.6 or better in 12 units or more of college work for the semester. Honorees are eligible for membership in Tau Alpha Epsilon, the college scholarship society. Privileges for honorees include priority in registration and special library privileges.

Mark G. Albanese
Neil M. Alexander
(2) Karen B. Anderson
Charles H. Arias
Linda R. Arkin
Fred C. Avalime
Edward Balash, Jr.
(3) Maria R. Baldoquin
Karalee Balue
Gail L. Barsch
(2) Brian J. Bemel
Brenda Fay Biller
Patricia Blanchard
Silvia E. Bosch
(2) Diana Marie Brookes
(2) Margaret L. Brown
Richard N. Brown
Winnifred C. Brown
Jerry A. Burman
William C. Campbell
Uta S. Cass
(3) Donna J. Chamberlain
(2) Darrell D. Chessum
John Snowden Conkey
Robert E. Cook
(2) Ronald J. Cox
(2) John H. Davis
Paul L. Dixon
Michael N. Dote
Leonard H. Dreyer
Sonja N. Eden
(2) Gerald R. Ehle
Morris Ehrenberg
(2) Mary G. Escobar
Allen F. Fisch
Helene K. Fishon
Mona J. Fong
Glenn K. Fujikuni
(4) Irene K. Fukunaga
Deborah L. Galford
Michael E. Galvin
Rose Mary Garrison
(2) Madeleine Gassian
(3) Cherry G. S. Gee
Leslie W. Gilbert
Ogealee Glanders
Philip M. Goldberg
Terry M. Goldberg
Michael G. Golden
Sheila Goldman
Stanley A. Goldman
Joseph C. Goodman
(2) Albert F. Gray
(2) Daniel Hanin
Gelane G. Hanrahan
Gardner Roy Haskell
(2) Patrick G. Hatcher
Yvonne Y. Hatfield
Donald W. Hayward
Grace E. Hengst
Maureen R. Hoffman
(3) Michael R. Holland
Vivian M. Hollister
Daryl K. Houston
(2) Mark R. Ideen
Charles M. Ingram
M. Christine Jackson
Carol N. Johnson

J. Michael Johnson
Royal J. Johnson
(2) Gary L. Jones
Joyce Jung
Judith R. Kahn
(2) Shunji Kamada
Randi L. Kaplan
(2) Kenny Kasuyama
Cynthia Keyes
(2) Lester B. King
(2) Harry C. Knobel
Setsuko D. Kono
Abraham S. Koresh
Kensaku Kuwahara
Greta L. Kwon
Raymond R. Lang
Gregory P. Lasser
Nancy Lee
(2) Alex Litwak
(4) Elizabeth M. Low
Howard KK Luke
(4) Fred Luna
Joanne P. Lutz
(3) L'Bertrice Maddox
Vicki L. Malott
Alice Mandilian
Patricia Ann Mark
Patricia J. Marsh
Wilbert D. McZeal
Fred S. Melnick
Alfred Mendoza, Jr.
Anna Mae Mitchell
Dolores M. Mitchell
Zareh A. Mitilian
Barbara Sue Mlotok
Arthur R. P. Moore
(2) Gerald P. Moore
(2) Marjorie C. Morita
(2) David T. Moss
Thelma C. Moulison
Allen Earl Murdock
Mark C. Murphy
Ruth Ann Myron
Mary E. Nash
(2) Kyra Nekrachevitch
(3) John R. Null
(2) Edward O'Palka
Naomi J. Oretsky
(2) Maurica G. Osborne
(2) Gustavo E. Paladines
(3) John E. Parker
Walter D. Patterson
David M. Pepper
Andrea P. Petit
Carole Ann Phinney
Ethel M. Phoebus
Robert Rachwal
William Regueira
Lawrence Reich
(2) Alan W. Ritch
Temma M. Robertson
(2) Naomi S. Rosen
Charles S. Rotondi
Kenneth S. Sakiyama
Michael A. Salvetta
(2) Enriquita C. Sanchez
Dorothy L. Sanders
(3) Hyman Sanders
Sueann A. Sarreal
(3) Gunter J. Schmitz
(2) Phyllis Shapson
(4) Janice Shimamoto
(2) Charlene N. Shimazu
(5) Donna M. Silverman
Joseph P. Sinda
John D. Smelser
Sylvia Sue Sommer
Valerie J. Sommer
Ronald L. Spivack
James W. Thompson
Larry G. Tinkcom
(2) John H. Toll
(3) Aliakbar Vakilmozaffari
Mark J. Vella
Bryan Joel Vine
(3) Marilyn R. Von Schimmelmann
David R. Walmisley
(2) Gail A. Warren
(2) Cathleen J. Weil
Ruth S. Weissman
Clinton L. Williams
Harriet J. Wollis
Helaine Joy Wollis
Linda S. Wong
Regderick Wong
Leon B. Wright
(3) Wendy Mae Wright
Lani M. Yamashita
Megumu Yamauchi
(3) Pak Tong Yee
Virginia Yee
Luella Young
Walter Zvaleko

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(2) (3) (4) (5) indicates number of times on list

Back panels, Dean's Honor List, Los Angeles City College. Two-fold flyer. canary stock printed in blue.

APPENDIX E

ALLIED HEALTH PROGRAMS

El Centro College
Dallas County Junior College District

El Centro College of the Dallas County Junior College District has two instructional divisions that offer programs in the allied health fields. The Nursing Division offers the Associate Degree Nursing Program. The Paramedics Division currently offers eight programs. These are listed in the enclosed table along with current active enrollments in each of the programs. Attached you will find brochures describing the programs in greater detail.

A program of cooperation between the Health Center at El Centro College and the students in the Vocational Nursing Program enables students to receive on-the-job experience in the Health Center. This type of in-house internship has been in operation only for a few months but it is currently judged to be successful. When the students later go to hospitals for clinical experience, they require less orientation and can thus begin to profit from the hospital experience more rapidly. A significant by-product of this cooperative program is the increased service that can be offered by the Health Center.

Plans have been discussed in the Paramedics Division for a "mini-hospital." This would not involve any additions to the program but would consist primarily of physical and programmatic restructuring so that a more realistic working environment is available. For example, students in initial stages of the Central Service Technology program would maintain and provide materials necessary for students in other paramedic programs. Medical records would be maintained for students in the paramedic programs as well as other students in the college. This plan, if it materializes, would permit the students to experience the often complicated interrelationships among the various specialities and organizational divisions found in hospitals.

Next year it is anticipated that core courses would be developed in the paramedic programs. In many instances, these courses would lend themselves to an adaptation of the mini-college structure which is currently operative in the transfer area. This arrangement should provide for greater instructional efficiency, a reduction of scheduling problems for clinical experience segments of the programs, and permit more convenient schedules for faculty members who often must travel back and forth between hospitals and the college.

The entire respiratory therapy facility at one of the smaller local hospitals was set up and initially operated by students in this program. This cooperative endeavor provided a significant service for the hospital and invaluable experience for the students. It also provided a full-time job for one of the students after the program was completed. Similar projects will be undertaken with other small hospitals in the Dallas County area when educational benefits can be derived. This can be expanded to other paramedic programs which lend themselves to this type of project, such as the Central Service Technology program.

A special purpose three hour medication course has been developed and is being offered for Licensed Vocational Nurses who find it necessary to increase their competence in this area.

The Nursing Division is currently working with senior institutions to develop a coordinated program which would permit graduates of the two-year program to continue toward a four-year degree in nursing if they so wish. If this can be achieved, this would provide an avenue for professional growth which is often lacking in many of the allied health specialties.

Last year, an experimental program was undertaken in the Nursing Division which involved the multiple assignment of students to a single patient. For example, a team of three students would function as observer, information collector, and practitioner with a single patient. As the clinical experience continued, each of the students would rotate through these three roles. It was hypothesized that each student, being required to function in only one role at a time, would thus gain more from the clinical experience. Provision was made for the student team to "compare notes" on their observations, information, and experience. This experimental project is currently being analyzed in detail, but preliminary analyses indicate that greater amounts of information and retention of information has resulted.

With the assistance of a U.S. Office of Education "small grants" contract, the Nursing Division is currently developing and evaluating the usefulness of increased independent study components in two of the nursing theory courses. If successful, this approach can be extended to all of the nursing theory courses. Details of this project are included in the following excerpts from the project proposal.

> Objectives: 1. An objective of this study is to ascertain what difference in achievement, if any, occurs between the Central Lecture Series, herein described, and a traditional lecture process currently in operation at El Centro College in the learning of selected materials in Fundamentals of Nursing and Medical Surgical Nursing within the Associate Degree Nursing program.

2. An objective of this study is to ascertain what difference in achievement, if any, occurs between the population enrolled in the first year of the Associate Degree Nursing program and the students who have proved academic ability and are enrolled in the second year of the program.

Purposes: To provide the student with a sound understanding of the theory of nursing and to:

1. Act as in-service education for instructors with little or no experience in the field of nursing education.
2. Allow for greater flexibility in student schedules.
3. Provide students with individual attention while allowing expansion of class enrollment.
4. Allow instructors to more effectively identify and meet the specific individual needs of a student while he is enrolled in a large class.
5. Allow the learner to progress at his own rate thereby reducing class attrition.

The Procedure: Students enrolling in the Fall semester courses will be divided into two groups through random sampling. Group A of both courses will engage in the traditional lecture method employed in the past and will serve as the control group.

Group B of both courses will be involved in the Central Lecture Series and will serve as the experimental group.

Group A students will meet in groups as large as 50 for the required number of hours of lecture each week for the course in which they are registered.

Group B students will be enrolled in the Central Lecture Series and will go to the Instructional Media Center for block tapes and work book sessions. They will each select one of the small group sessions which will meet weekly.

The block tapes for Group B and the classroom lectures for Group A will be presented by the same area specialist. Both groups will be tested and examined periodically and the same tools will be employed in both groups throughout the courses.

This brief report, limited only to the Paramedics and Nursing Divisions at El Centro College, overlooks many of the other innovations and developments in the college which have "splash-over" effects. For example, a general college-wide interest has developed in the use of specific behavioral objectives as ways of describing courses, educational outcomes, etc. The Paramedics Division at El Centro College has probably demonstrated the greatest use of this technique.

ALLIED HEALTH OCCUPATIONS PROGRAMS

El Centro College

Fall, 1968

	Students Enrolled
Associate Degree Nursing	133
Central Service Technician	12
Dental Assistant	33
Medical Office Occupations	11*
Nurse Aide (program will be offered in Spring, 1969)	-
Operating Room Technology	7
Radiologic Technology	28
Respiratory Therapy	57
Vocational Nursing	58

*This total does not include the students in the Medical Secretary program, which is administered by the Business Division.

RESPIRATORY THERAPY

THE NEED FOR TRAINED PERSONNEL

Respiratory Therapy is one of the fastest growing of paramedical specialties. New medical treatments of cardiac and respiratory ailments have created a tremendous demand for qualified personnel in this comparatively new and rapidly expanding field.

In metropolitan Dallas, where there are only a few certified respiratory therapists, the need for qualified specialists is critical.

The respiratory therapy technician and assistant, working under the direction of a physician, administer treatments to patients with heart and lung ailments, aid in resuscitation efforts, instruct patients in aerosol therapy, and assist with diagnostic examinations.

The well-trained therapist may advance to supervisory and instructor positions.

THREE PROGRAMS OF THE COLLEGE

El Centro College offers a three-step program designed to train and develop skilled workers in the field of Respiratory Therapy and enable them to enter employment at varying levels of responsibility.

All students will enter the program in Step 1. Those completing the first step may become Respiratory Therapy Assistants; those continuing on and completing Step 2 may become Respiratory Therapy Technicians, eligible for state licensure; those completing Step 3 will receive an Associate in Applied Science degree with eligibility to take the examination for certification by the American Registry of Inhalation Therapists.

Classroom instruction in the college's modern downtown campus will be coupled with practical clinical experience in some of Dallas's finest hospitals. Students will have access to campus food services, recreation areas, library, and other facilities.

Suggested courses of study for the three programs follow:

FIRST YEAR

Fall Semester (Step 1)	Credit Hours
Respiratory Therapy 130 — Fundamentals	12
Respiratory Therapy 131 — Clinical Practice I	2
Communications 131 — Applied Composition and Speech	3
	17

Spring Semester (Step 2)	
Zoology 215 — Human Anatomy and Physiology	4
Physical Science 115 — Physics and Chemistry	4
Respiratory Therapy 132 — Respiratory Therapy Technology	4
Respiratory Therapy 133 — Clinical Practice II	4
	16

Summer Session	
Respiratory Therapy 134 — Therapy Related to Disease	3
Respiratory Therapy 135 — Clinical Practice III	5
	8

SECOND YEAR (STEP 3)

Fall Semester	
Social Science 131 — American Civilization	3
Psychology 231 — Applied Psychology	3
Business 236 — Supervisory Management	3
Respiratory Therapy 230 — Board Preparation	3
Respiratory Therapy 231 — Clinical Practice IV	3
	15

Spring Semester	
Humanities 101 — Humanities	3
Social Science 132 — American Civilization	3
Communications 132 — Applied Composition and Speech	3
Data Processing 135 — Introduction to Data Processing	3
Respiratory Therapy 232 — Seminar	3
	15

INSIDE PANELS OF TYPICAL ONE FOLD FLYER DEVELOPED BY
DALLAS COUNTY JUNIOR COLLEGE DISTRICT TO PROMOTE
ITS HEALTH RELATED PROGRAMS